

U.S. DEPARTMENT OF ENERGY  
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

**NUCLEAR WASTE TECHNICAL REVIEW BOARD  
FULL BOARD MEETING**

**SUBJECT: LICENSE APPLICATION  
ANNOTATED OUTLINE**

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**SALT LAKE CITY, UTAH  
JULY 11-12, 1995**

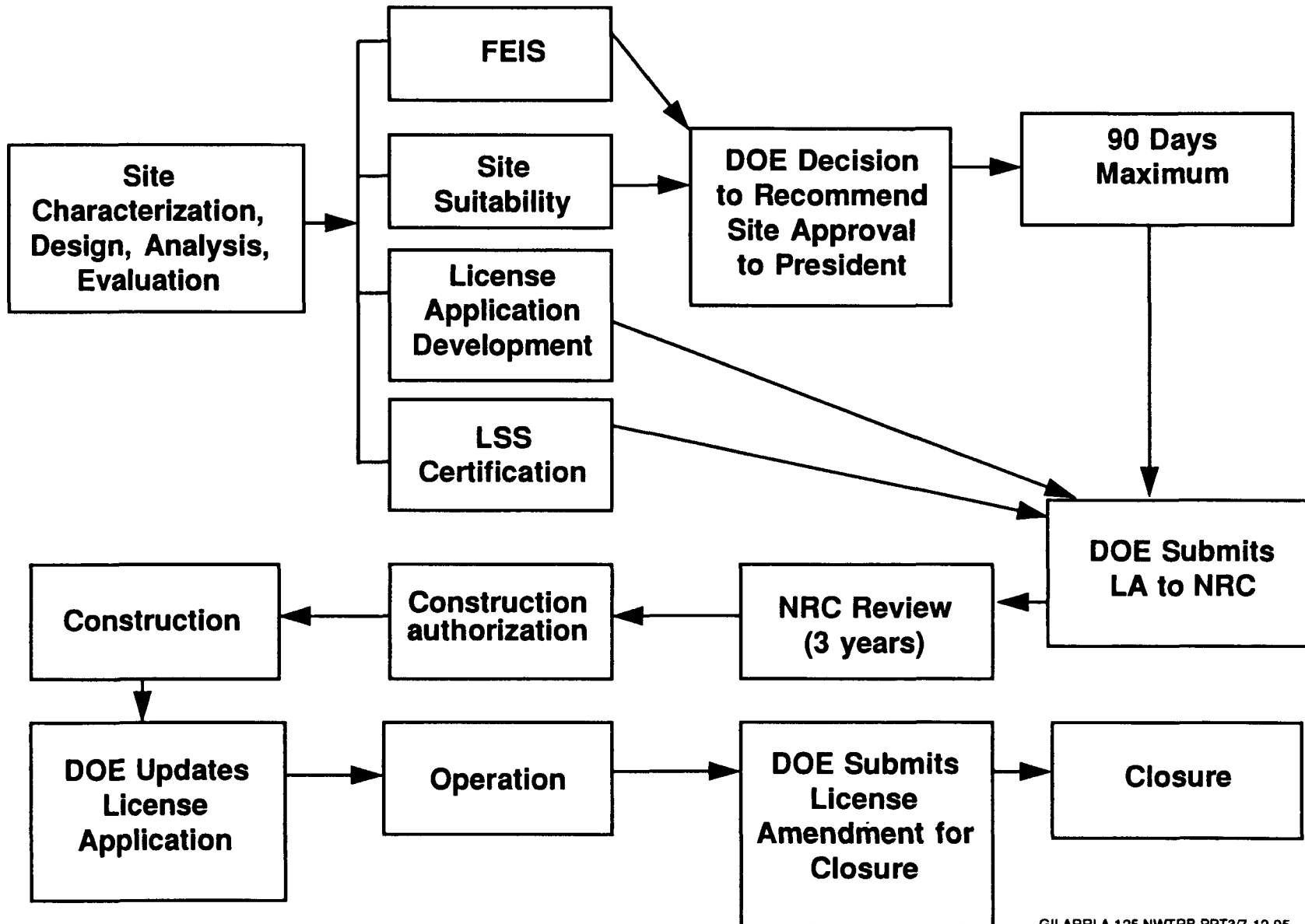
# **License Application Annotated Outline**

- **Objective**
- **Background**
- **License Application Annotated Outline Process**
- **Annotated Outline Activities and Results to Date**
- **Future Plans**
- **Issue Resolution Process**
- **Conclusion**

# **License Application Annotated Outline**

- **Objective is the development of an acceptable License Application (LA) for submittal to the NRC**
- **Early DOE/NRC communication and identification of issues and status is essential to meet the statutory NRC 3-year review period for LA**
- **Methodical construction of the Annotated Outline (AO), with annual revisions, ensures the development of an acceptable LA by identifying information needed for licensing**
- **The License Application must support NRC's reasonable assurance finding concerning performance objectives and technical criteria, as required by 10CFR60, Subpart E**

# Major Licensing Milestones



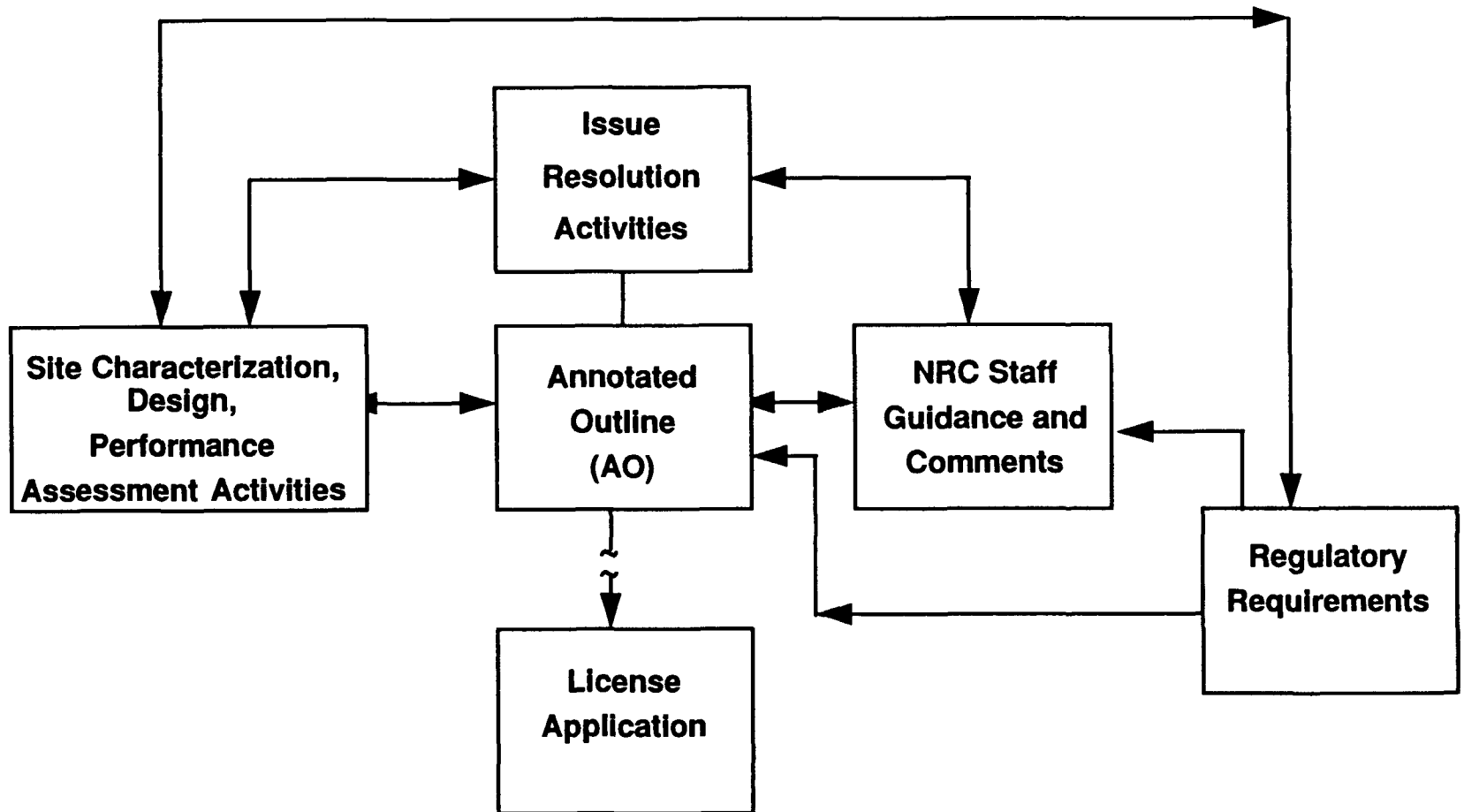
# Background

- **NRC suggested preparation of a “bracketed” LA**
  - **Allows document to be developed as information is acquired**
  - **Identifies necessary information**
- **DOE initiated the development of a bracketed License Application (or Annotated Outline) in 1991**
- **Document revised annually and transmitted to the NRC**
- **Interim revisions may be provided to communicate progress on specific issues or topics**

# **Benefits of License Application Annotated Outline**

- **Management tool to evaluate existing information and identify information needs for planning purposes**
- **Method for obtaining feedback on DOE interpretation of NRC requirements and guidance**
- **Method to ascertain when information is sufficient to demonstrate compliance with applicable regulatory requirements**

# License Application Annotated Outline



# **License Application Annotated Outline Process**

- **LA AO process captures**
  - **Known and available information provided in text, tables, and figures**
  - **Missing or incomplete information identified in brackets and documented on Information Needs forms**
  - **Information existing prior to license submittal, to facilitate discussion**



# **License Application Annotated Outline Process**

**(Continued)**

- **Each revision integrates information from site characterization, design, and performance assessment activities**
- **Revised LA AO undergoes interdisciplinary reviews**
- **Approved revision is submitted to NRC for review and feedback**
- **Information Needs for licensing are compiled and used to focus annual and long-range planning**

# **License Application Annotated Outline Process**

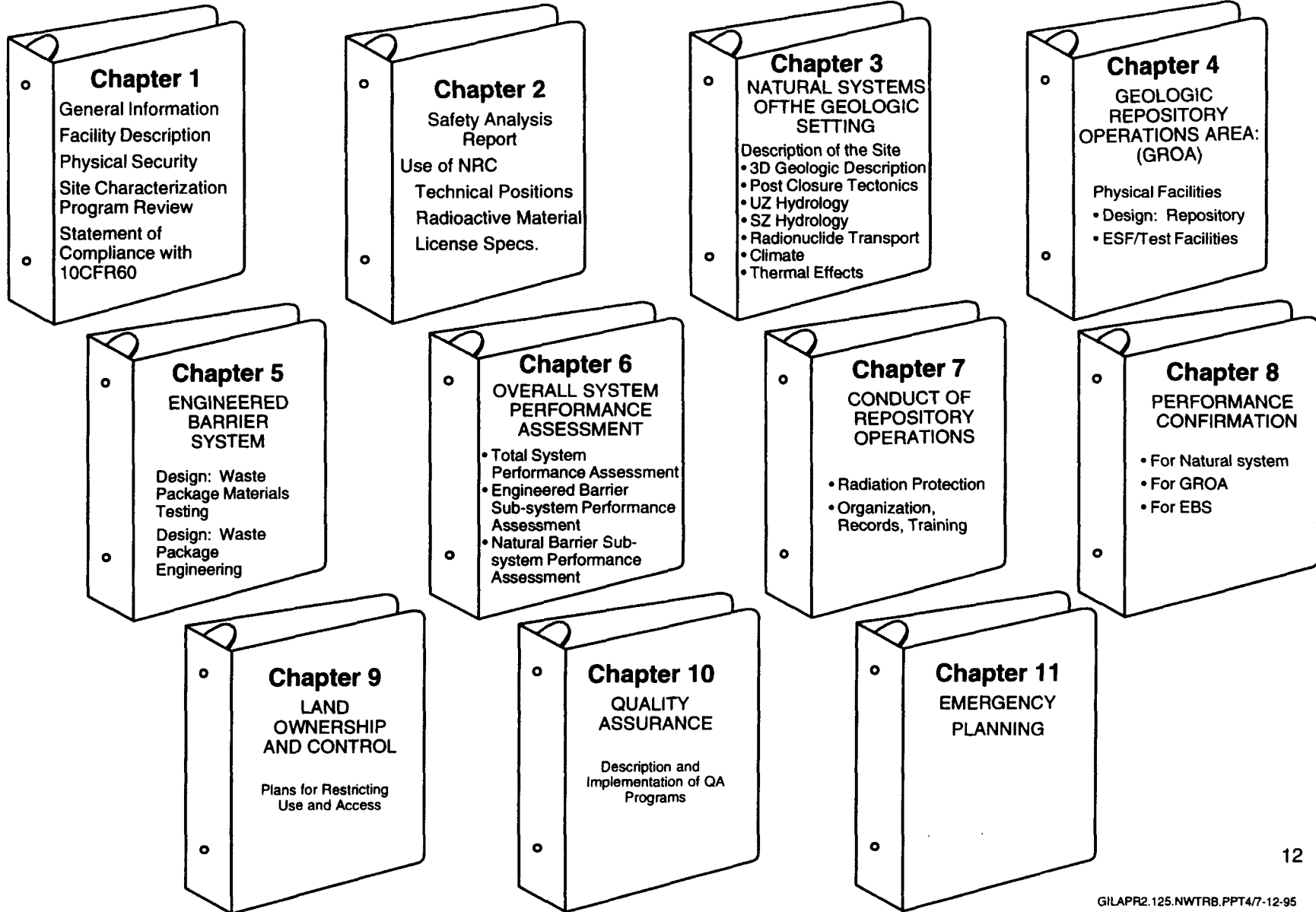
(Continued)

- **NRC has provided guidance on the content and format of the LA**
  - **Preliminary guidance in the Draft Regulatory Guide “Format and Content for the License Application for the High-Level Waste Repository” (FCRG) November 1990**
  - **Criteria used by NRC in reviewing LA and reaching required findings contained in the “License Application Review Plan for a Geologic Repository for Spent Nuclear Fuel and High-Level Radioactive Waste” (LARP) September 1994**

# **License Application Annotated Outline Status**

- **Fifth LA AO was submitted to NRC as “Revision 0” DOE document in March 1995**
- **About 1200 Information Needs have been provided to program planners**
- **Work is in progress to tie each Information Need to a deliverable and date for the deliverable**

# License Application Contents



# Future Activities

- **LA AO Revision 1 to be submitted to NRC in January 1996**
- **Plan to include the following:**
  - **Update of text to ensure Information Needs are fully developed in all chapters**
  - **Results of FY95 site characterization activities**
  - **Results of Total System Performance Assessment -1995**
  - **Available design information**
  - **Description of Quality Assurance Program**
  - **Additional chapter-specific information**

# **Future Activities**

(Continued)

- **Deliverables for each revision to LA AO have been listed in Program Plan**
- **Future revisions to LA AO:**
  - **Revision 1, January 1996**
  - **Revision 2, February 1997**
  - **Revision 3, January 1998**
  - **Revision 4, June 1999**
  - **Revision 5, January 2000**
- **Planned LA submittal to NRC June 2001**

# Issue Resolution Process

- **Two organizing principles of site characterization:**
  - **Issues hierarchy (questions needing resolution to demonstrate compliance with regulations)**
  - **Issue resolution process (issue identification, performance allocation, data collection/analysis, and resolution documentation)**

# Issue Resolution Process

(Continued)

- **NRC has indicated that DOE should provide issue resolution information through**
  - **LA AO**
  - **A small number of specified Topical Reports**
  - **Semi-Annual Site Characterization Progress Reports**
  - **Responses to NRC's Site Characterization Analysis Comments and Questions**
- **DOE plans to use the LA AO process to provide the NRC with information necessary to resolve licensing issues**



# Conclusions

- **LA AO process is being used to develop License Application within schedule and in a form that will allow docketing and review by NRC within statutory review period**
- **LA AO will be the focus of issue resolution activities as the primary vehicle for communication with NRC on these issues**
- **Program must focus multi-disciplinary resources on License Application development to succeed**

Site  
Characterization

Design  
Development

AO

Performance  
Assessment

Issue  
Resolution