



Proposed Revision to Section 13.3, “Emergency Planning” (EP) of the Standard Review Plan (SRP) & Combined License Application Guidance (DG-1145)

Presented By

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Section 13.3, “EP” of the SRP and DG-1145

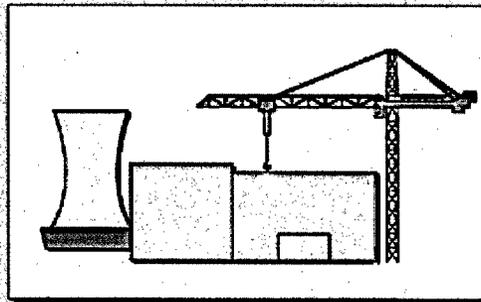
- Standard Review Plan (SRP) (NUREG-0800) Section 13.3, “Emergency Planning”
- COL Application Guidance (DG-1145) Section 13.3, “Emergency Planning”

Combined Licenses, Early Site Permits, and Standard Design Certifications

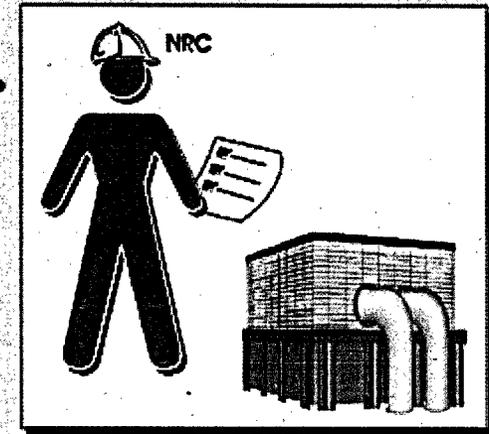
Early Site Permit*



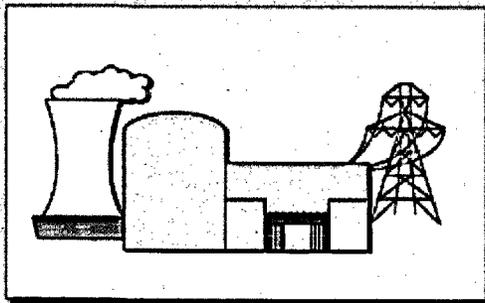
Reactor Construction



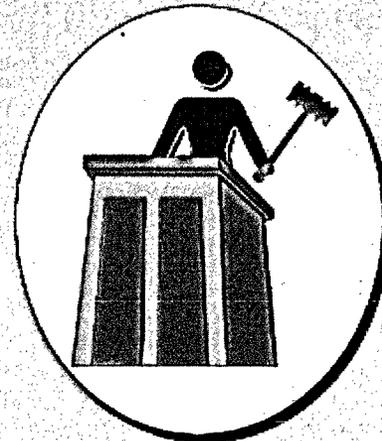
Verification of Inspection,
Tests, Analyses, and
Acceptance Criteria



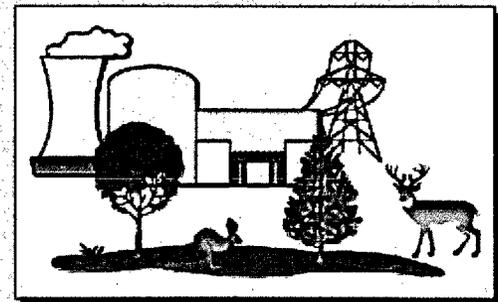
Standard Design
Certification*



Combined License
Review and Hearing



Reactor Operation



* or equivalent process



Section 13.3, “EP” of the SRP and DG-1145

Regulatory Process

- Emergency Planning continues to be a part of the licensing process. (10 CFR 50.33, 50.34, 50.47, 50.54, and Appendix E, and 10 CFR part 52)
- President’s decision of December 7, 1979 reemphasizes the NRC’s continuing statutory responsibility for the radiological health and safety of the public.



Section 13.3, "EP" of the SRP and DG-1145

Regulatory Process (cont'd.)

- Emergency Preparedness "Reasonable Assurance" finding needed prior to issuing License - 10 CFR 50.47(a)
- **NRC** makes this finding based on:
 - A review of FEMA (**DHS**) findings and determinations concerning **offsite** plans
 - and **NRC** findings and determinations concerning **onsite** plans.
 - NRC/FEMA Memorandum of Understanding establishes working relationship - 44 CFR 353, Appendix A



Section 13.3, “EP” of the SRP and DG-1145

Regulatory Process *(cont'd.)*

- 16 Planning Standards of 10 CFR 50.47(b)
- Requirements of 10 CFR 50, Appendix E
- Regulatory Guide 1.101
 - NUREG-0654, FEMA-REP-1, Rev. 1
Acceptance Criteria
 - NEI 99-01, Rev. 4, EALs



Section 13.3, “EP” of the SRP and DG-1145

Regulatory Process (cont'd.)

- **Emergency Preparedness (EP)**
 - A “Licensing Condition” - 10 CFR 50.54(q)
 - Deficiency 120 day clock - 10 CFR 50.54(s)
 - Reality presumption - 10 CFR 50.47(c)
 - Supported by two sets of plans:
 - “Onsite” emergency plan (Facility plan)
 - “Offsite” emergency plan (State & local plans)



Section 13.3, “EP” of the SRP and DG-1145

Regulatory Process (cont'd.)

- **10 CFR Part 50**
 - **2-Step Process:**
 - Construction Permit
 - Operating License



An EP Perspective on New Reactor Licensing

Regulatory Process (cont'd.)

- **10 CFR Part 52 – Alternative licensing process**
 - **Established in 1989**
 - Improve Regulatory Efficiency
 - Add Greater Predictability
 - Essentially the Same Information as Part 50
 - Combines Construction Permit & Operating License with Conditions for Plant Operation – Combined License (COL)
 - Specify Applicant Inspection, Tests, Analysis and Acceptance Criteria (ITAAC)



An EP Perspective on New Reactor Licensing

Regulatory Process (cont'd.)

- **10 CFR Part 52 – Alternative licensing process**
 - **Acceptance Criteria**
 - Provide Reasonable Assurance that the facility has been constructed and will operate in conformity with the license and applicable regulations



Section 13.3, “EP” of the SRP and DG-1145

Regulatory Process (cont'd.)

- 10 CFR Part 52 – Combined License
 - NRC
 - Authorize fuel load ONLY after ITAAC met
 - Periodic Federal Register Notice as ITAAC met
 - 180 days prior to scheduled initial loading of fuel
 - *Publish notice of intended operation in Federal Register*
 - Hearing opportunity if petitioner demonstrates that Acceptance Criteria not met



Section 13.3, “EP” of the SRP and DG-1145

Regulatory Process (cont'd.)

- COL
 - **10 CFR 52.79(d) *proposed* 10 CFR 52.79(22)**
 - Obtain Certifications from agencies with EP responsibilities that:
 - (A) Plans are practicable
 - (B) Commitment to further develop plans including field demonstrations
 - (C) Commitment to execute responsibilities



Section 13.3, “EP” of the SRP and DG-1145

Regulatory Process (cont'd.)

- COL
 - *Proposed 10 CFR 50.54(gg)*
 - Allows operation up to 5% power with offsite deficiencies
 - Much like existing requirement in 10 CFR 50.47(d)



Section 13.3, “EP” of the SRP and DG-1145

Regulatory Process *(cont'd.)*

- **10 CFR Part 52 – Combined License**
 - **COL can incorporate by reference**
 - Design Certification
 - Early Site Permit
 - **Issues resolved in ESP or Design Certification are precluded from reconsideration at COL Stage**



Section 13.3, “EP” of the SRP and DG-1145

Regulatory Process (cont'd.)

- Standard Design Certification
 - **10 CFR 52 Subpart B**
 - Allows certification of Nuclear power facilities separate from filing an application for construction or combined license
 - No specific EP Requirements



Section 13.3, “EP” of the SRP and DG-1145

Regulatory Process (cont'd.)

- **Early Site Permit (ESP)**
 - **Independent of Plant Design**
 - **Valid for 10 – 20 Years, Renewable**
 - **Resolve early issues on**
 - **Site Safety**
 - **Emergency Preparedness**
 - **Environmental Protection**



Section 13.3, “EP” of the SRP and DG-1145

Regulatory Process *(cont'd.)*

- **Early Site Permit (ESP)**
 - **10 CFR 52.17**
 - (b)(1) Unique Physical Characteristics that could pose significant impediment to developing EP
 - (b)(2)(i) Major Features (NUREG-0654, Supplement 2)
 - (b)(2)(ii) Complete and Integrated Plans



Section 13.3, “EP” of the SRP and DG-1145

Regulatory Process (cont’d.)

- ESP (cont’d.)
 - **10 CFR 52.17 (cont’d.)**
 - (b)(3) Describe contacts and arrangements with agencies with EP responsibilities [(b)(1) & (b)(2)(i)],
OR
 - Obtain Certifications from agencies with EP responsibilities that [(b)(2)(ii)]:
 - (3)(i) Plans are practicable
 - (3)(ii) Commitment to further develop plans including field demonstrations
 - (3)(iii) Commitment to execute responsibilities



Section 13.3, “EP” of the SRP and DG-1145

- Standard Review Plan (SRP) (NUREG-0800) Section 13.3, “Emergency Planning”
- COL Application Guidance (DG-1145) Section 13.3, “Emergency Planning”



Section 13.3, “EP” of the SRP and DG-1145

SRP Section 13.3, EP

- Provides for review of EP in
 - Construction Permit (CP)
 - Operating License (OL)
 - Early Site Permit (ESP)
 - Standard Design Certification (DC)
 - Combined License (COL)



Section 13.3, “EP” of the SRP and DG-1145

SRP Section 13.3, EP

- Identifies Review Interfaces within SRP
- Identifies Regulatory Requirements
- Establishes Acceptance Criteria to existing Regulatory Guidance
- Provides Technical Rationale
- Outlines Review Procedure
- Proposes generic Evaluation findings
- Extensive Reference list
- Generic EP ITAAC Table



Section 13.3, “EP” of the SRP and DG-1145

SRP Section 13.3, EP

- Consideration of existing programs
 - Is it applicable to proposed reactor
 - Is it up-to-date
 - Reflects and incorporates new reactor



Section 13.3, “EP” of the SRP and DG-1145

SRP Section 13.3, EP

- Emergency Action Levels (EALs)
 - NEI 99-01 applicable EALs used
 - NEI 99-01 EAL development guidance
 - Passive reactor designs EALs



Section 13.3, “EP” of the SRP and DG-1145

SRP Section 13.3, EP

- **Inspection, Test, Analysis, Acceptance Criteria (ITAAC)**
 - Generic EP ITAAC provided in Table 13.3.1
 - Develop with Industry & public participation
 - Based on existing NUREG-0654 criteria
 - Not all-inclusive, or exclusive
 - Applicant proposes and accomplishes
 - Case-by-case determination



Section 13.3, “EP” of the SRP and DG-1145

SRP Section 13.3, EP

- Offsite EP Guidance
 - Current REP-series guidance documents
 - Associated Memoranda
 - Radiological Emergency Preparedness: Planning Guidance, February 28, 2003



Section 13.3, “EP” of the SRP and DG-1145

SRP Section 13.3, EP

- Standard Design Certification EP (not required)
 - EP features are technically relevant to the design, and not site-specific, and usable for a multiple number of units or sites
 - Programmatic aspects of EP are COL applicants' responsibility
 - Facilities, functions, and equipment to support EP
 - TSC, OSC, Personnel Decontamination
 - Location, size, habitability, ventilation systems
 - ERDS, SPDS, Voice and data Communications



Section 13.3, “EP” of the SRP and DG-1145

DG-1145 Section 13.3, EP

- Provides guidance on EP information in a Combined License for a
 - Custom design
 - Certified Design
 - Certified Design with ESP



Section 13.3, “EP” of the SRP and DG-1145

DG-1145 Section 13.3, EP

- Addresses EP information in a Combined License
 - Application & Emergency Plan Content
 - Multi-Unit Site considerations
 - EP ITAAC



Section 13.3, “EP” of the SRP and DG-1145

ACRS Preliminary Questions

- Substantive change to Section 13.3 is incorporation of Part 52 process
 - EP ITAAC
 - “Predictive” reasonable assurance finding
 - Timing of exercise



Section 13.3, “EP” of the SRP and DG-1145

ACRS Preliminary Questions

- Guidance for “green-field” sites
 - Existing guidance is applicable
 - Considered in development of generic EP ITAAC
 - Continue discussion with DHS
 - Plans needed at COL application stage
 - Implementing Procedures developed later



Section 13.3, “EP” of the SRP and DG-1145

ACRS Preliminary Questions

- **Completeness of EP ITAAC Table for ESP**
 - Generic EP ITAAC provided in Table 13.3.1
 - Develop with Industry & public participation
 - Based on existing NUREG-0654 criteria
 - Not all-inclusive, or exclusive
 - Applicant proposes and accomplishes
 - Case-by-case determination



Section 13.3, “EP” of the SRP and DG-1145

ACRS Preliminary Questions

- Diversity of planning options including evacuation, sheltering, and KI
 - NUREG-0654, J.10.f – KI
 - NUREG-0654, J.10.g - Evacuation
 - NUREG-0654, J.10.m - Shelter



Section 13.3, “EP” of the SRP and DG-1145

Comments from public review period

- Not open the existing site emergency plan for review
- Expansion of ITAAC
- Use of the term “generic communications”
- Submittal of offsite implementing procedures
- Absence of DHS/FEMA/REP, planning references and limited offsite emergency response plan related review criteria.



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Questions?

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