

Fuel Cycle Information Exchange 2007

Part 70 Upgrade 2000
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Genesis of Rulemaking

1. NUREG 1324, 1992, by NRC Materials Regulatory Review Task Force
2. NEI Petition for Rulemaking, 11/26/96, at 61FR60057
3. NRC proposed rule, 7/30/99, at 64FR41338

Standard Review Plans

Staff produced two new SRPs:

NUREG 1520, 3/2002, for fuel cycle facilities

NUREG 1718, 8/2000, for MOX fuel facilities

NRC Approach

- Adopted a risk-informed, performance-based approach based on a systematic safety analysis of potential events
- --with extensive stakeholder participation continuing from 1995 through 2000
- --more than 90 formal comments on proposed rule, 200 on draft SRPs

Final Rule 9/18/2000

Included:

1. Evaluate compliance with performance requirements (70.61)
2. Establish safety program, conduct an ISA, establish management measures (70.62)
3. Address specified baseline design criteria (new facilities or processes) (70.64)

Final Rule (continued)

4. maintenance of the safety bases,
including reporting of changes (70.72)
5. defined conditions for changes permitted
without NRC approval (70.72)
6. additional reporting requirements(70.74)
7. backfitting controls on Subpart H after ISA
Summary approval(70.76)

Significant Issues raised during rule and SRP development

1. Some personnel actions would be IROFS
2. The definition of “controlled area” and associated personnel exposure limits
3. Required maintenance of a “failure log”
4. Degree of detail in the ISA Summary
5. When the backfit controls become effective

Significant Issues (continued)

6. Definition of “new type” of accident sequence
7. Definitions of “highly unlikely”, and “unlikely”
8. Qualitative vs. quantitative assessment
9. “Equivalent replacement” of IROFS
10. Hazardous chemicals – what would be regulated by NRC

Significant Issues (continued)

11. Management measures – QA and configuration management

ISA Reviews to date

Are reviewing or have reviewed 9 ISAs:

NFS, GNF, AREVA (2), W, BWXT, USEC,
LES, MOX

Stakeholder views on 6 years experience?

What improvements are cost effective?