

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
OFFICE OF NUCLEAR REACTOR REGULATION  
WASHINGTON, D.C. 20555-0001

October 10, 1997

**NRC INFORMATION NOTICE 97-77: EXEMPTIONS FROM THE REQUIREMENTS OF SECTION 70.24 OF TITLE 10 OF THE CODE OF FEDERAL REGULATIONS**

Addressees

All holders of operating licenses for nuclear power reactors.

Purpose

The U.S. Nuclear Regulatory Commission (NRC) is issuing this information notice to inform addressees about actions the staff plans to take regarding enforcement actions and the granting of exemptions from the requirements of Section 70.24 of Title 10 of the Code of Federal Regulations (10 CFR 70.24). This information notice does not transmit or imply any new or changed requirements or staff positions. No specific action or written response is required.

Description of Circumstances

Regulations in 10 CFR 70.24 require that each licensee authorized to possess more than a small amount of special nuclear material maintain in each area in which such material is handled, used, or stored a criticality monitoring system that will energize alarm systems if accidental criticality occurs. The staff has issued approximately 20 notices of violation for failures by licensees to meet the provisions of 10 CFR 70.24. Since the issuance of these notices of violation, the staff has found it appropriate to exercise enforcement discretion pursuant to Section VII B.6 of the Enforcement Policy, NUREG-1600, "General Statement of Policy and Procedure for NRC Enforcement Actions."

Discussion

As stated in a policy issue information paper, dated July 21, 1997, from the Executive Director for Operations, NRC, to the NRC Commissioners (SECY-97-155), the staff has determined that it is appropriate to exercise enforcement discretion in this case because the safety significance of the failure to meet 10 CFR 70.24 is minimal provided controls are in place to ensure compliance with general design criteria (GDC) 62. Also, enforcement discretion is appropriate because the NRC staff did not recognize the need for an exemption during the licensing process; because the NRC previously took a position on this matter, as reflected in its

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letter of May 11, 1988, to the Tennessee Valley Authority (NRC Accession No. 8902240029) concerning the lack of a need for an exemption at the Browns Ferry Nuclear Plant; and because of the staff's intent to embark on rulemaking to amend 10 CFR 70.24.

The staff intends to withdraw the previously issued violations. As specified in SECY-97-155, the staff does not intend to take further enforcement action for failure to meet 10 CFR 70.24 provided licensees obtain an exemption from this regulation before the next receipt of fresh fuel or before the next planned movement of fresh fuel. The criteria that the staff is using to evaluate exemptions from 10 CFR 70.24 are given in SECY-97-155 and are presented for information in the attachment to this notice.

This information notice requires no specific action or written response. If you have any questions about the information in this notice, please contact the person listed below or the appropriate regional office.

  
for Jack W. Roe, Acting Director  
Division of Reactor Program Management  
Office of Nuclear Reactor Regulation

Technical contact: G. Wunder, NRR  
301-415-1494  
E-mail: gfw@nrc.gov

Attachments:

1. Staff Criteria for Evaluating Exemptions from 10 CFR 70.24
2. List of Recently Issued NRC Information Notices

**STAFF CRITERIA FOR EVALUATING EXEMPTIONS FROM 10 CFR 70.24**  
**AS STATED IN SECY-97-155**

1. Plant procedures do not permit more than [1 PWR or 3 BWR] new fuel [assembly/assemblies] to be in transit between their associated shipping cask and dry storage rack at one time.
2. The k-effective of the fresh fuel storage racks filled with fuel of the maximum permissible U-235 enrichment and flooded with pure water does not exceed 0.95, at a 95 percent probability, 95 percent confidence level.
3. If optimum moderation of fuel in the fresh fuel storage racks occurs when the fresh fuel storage racks are not flooded, the k-effective corresponding to this optimum moderation does not exceed 0.98, at a 95 percent probability, 95 percent confidence level.
4. The k-effective of spent fuel storage racks filled with fuel of the maximum permissible U-235 enrichment and filled with pure water does not exceed 0.95, at a 95 percent probability, 95 percent confidence level.
5. The quantity of forms of special nuclear material, other than nuclear fuel, that are stored on site in any given area is less than the quantity necessary for a critical mass.
6. Radiation monitors, as required by GDC 63, are provided in fuel storage and handling areas to detect excessive radiation levels and to initiate appropriate safety actions.
7. The maximum nominal U-235 enrichment is 5 wt percent.

LIST OF RECENTLY ISSUED  
NRC INFORMATION NOTICES

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| Information Notice No. | Subject   | Date of Issuance | Issued to   |
|------------------------|---|------------------|---|
| 97-76                  | Crediting of Operator Actions in Place of Automatic Actions and Modifications of Operator Actions, Including Response Times | 10/14/97         | All holders of OLs for nuclear power reactors except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel |
| 97-75                  | Enforcement Sanctions Issued as a Result of Deliberate Violations of NRC Requirements                                       | 09/24/97         | All U.S. Nuclear Regulatory Commission licensees  |
| 97-74                  | Inadequate Oversight of Contractors During Sealant Injection Activities   | 09/24/97         | All holders of OLs for nuclear power reactors except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel |
| 97-73                  | Fire Hazard in the Use of a Leak Sealant  | 09/23/97         | All holders of OLs for nuclear power reactors except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel |

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OL = Operating License  
CP = Construction Permit

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The staff intends to withdraw the previously issued violations. As specified in SECY-97-155, the staff does not intend to take further enforcement action for failure to meet 10 CFR 70.24 provided licensees obtain an exemption from this regulation before the next receipt of fresh fuel or before the next planned movement of fresh fuel. The criteria that the staff is using to evaluate exemptions from 10 CFR 70.24 are given in SECY-97-155 and are presented for information in the attachment to this notice.

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original signed by D.B. Matthews for  
 Jack W. Roe, Acting Director  
 Division of Reactor Program Management  
 Office of Nuclear Reactor Regulation

Technical contact: G. Wunder, NRR  
 301-415-1494  
 E-mail: gfw@nrc.gov

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2. List of Recently Issued NRC Information Notices

\*See previous concurrence DOCUMENT NAME: G:\NICK\7024.IN2

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|--------|-------------|----------|---------------------------------------|-----------|
| OFFICE | PM:PDII     | PD:PDII  | D:OE                                  | PECB      |
| NAME   | GWunder*    | SBajwa*  | JLieberman*                           | RLDennig* |
| DATE   | 10/08/97    | 10/08/97 | 10/08/97                              | 10/08/97  |
| OFFICE | C:PECB      | D:DRPE   | D:DRPM                                |           |
| NAME   | SARichards* | BBOGER*  | JWROE<br><i>for</i> <i>DM 10/9/97</i> |           |
| DATE   | 10/09/97    | 10/08/97 | 10/9/97                               |           |

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