



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I  
631 PARK AVENUE  
KING OF PRUSSIA, PENNSYLVANIA 19406

Docket No. 50-170

FEB 9 1981

Defense Nuclear Agency  
Armed Forces Radiobiology Research Institute  
ATTN: Captain P. Tyler, USN  
Director  
Bethesda, Maryland 20014



Gentlemen:

The enclosed IE Circular No. 81-02, "Performance of NRC-Licensed Individuals While on Duty," is forwarded to you for information. A copy of this circular is also being mailed directly to each licensed reactor operator and senior reactor operator. No written response is required. If you desire additional information regarding this matter, please contact this office.

Sincerely,

*Boyce H. Grier*  
Boyce H. Grier  
Director

Enclosures:

1. IE Circular No. 81-02
2. List of Recently Issued IE Circulars

CONTACT: D. L. Caphton  
(215-337-5266)

cc w/encls:  
Captain R. Savage, USAF, Physicist,

8102280006

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT  
WASHINGTON, D.C. 20555

February 9, 1981

IE Circular No. 81-02: PERFORMANCE OF NRC-LICENSED INDIVIDUALS WHILE ON  
DUTY

Description of Circumstances:

Recently, an NRC inspector observed two licensed reactor operators who appeared to be asleep while on duty in the control room. A subsequent NRC investigation into the matter concluded that the operators were not fully attentive to their licensed duties of monitoring reactor conditions, which is a serious matter of safety significance. Furthermore, the investigation concluded that management controls were inadequate to assure the alertness of licensed operators while on duty. Enforcement action was taken after it was determined that attentive operators were not present at the controls as required by 10 CFR 50.54(k).

Discussion:

NRC believes that a relationship exists between the professional attitude of a nuclear plant's operating and management personnel and the degree to which the health and safety of the public is protected. NRC believes that professional attitude is reflected in high standards of performance including pride in the facility as demonstrated by the nuclear power plant staff. Factors making up this professional attitude include knowledge of all aspects of plant status by licensed control room operators, maintaining an orderly and clean working environment, aggressiveness of the operating staff to prevent operational problems, and correcting observed deficiencies. NRC believes that clarification of its position on this subject is necessary because several recent events involving licensed operators indicate a lack of a professional attitude at some nuclear power plants.

The following conditions and practices are among those the NRC believes to be necessary for the maintenance of a professional atmosphere in the control room and throughout the facility.

1. All on-duty NRC-licensed operators and operating supervisors must be aware of and responsible for the plant status at all times. This includes supervisors being responsible for the performance of all personnel assigned to their shift who could affect plant safety, regardless of specialty affiliation. Knowledge of the plant's status must be assured during shift changes by a formal watch turnover and relief.

Attachment:  
Recently issued IE circulars

2. All on-duty NRC-licensed operators must be alert, remain within their immediate areas of responsibility until properly relieved, and be particularly attentive to the instrumentation and controls located within these areas at all times.
3. Potentially distracting activities in the control room and other watch stations must be prohibited (for example: radios, TV, alcohol use or drug abuse, games, horseplay, hobbies, and reading that is not directly job related).
4. Control room access must be limited to those persons on official business only and loitering in this area must be prohibited.
5. All necessary plant-related technical/administrative control room business must be conducted at a location and in such a manner that neither licensed control room operator attentiveness nor the professional atmosphere will be compromised. This includes activities associated with the use of special eating and training facilities for on-shift personnel.

Additional Information:

NRC inspectors will be particularly mindful of those conditions and practices described above during future inspections of licensed nuclear facilities.

For more specific information, you are referred to the following NRC documents:

1. 10 CFR 50, "Domestic Licensing of Production and Utilization Facilities," Paragraph 50.54
2. 10 CFR 55, "Operators' Licenses," Paragraph 55.31 and 55.40
3. Regulatory Guide 1.114, "Guidance on Being Operator at the Controls of a Nuclear Power Plant"
4. IE Information Notice 79-20, Revision 1, "NRC Enforcement Policy - NRC-Licensed Individuals"
5. Letter from D. G. Eisenhower, NRC, to All Licensees and Applicants, dated July 31, 1980, Subject: Interim Criteria for Shift Staffing

The following excerpts are taken from some of these documents and are provided for your information:

1. Only licensed operators are permitted to manipulate the controls that directly affect the reactivity or power level of a reactor 010 CFR 50.54(i)o.
2. Licensed operators are required to be present at the controls at all times during the operation of the facility 010 CFR 50.54(k)o.
3. Operation of mechanisms and apparatus other than controls that may indirectly affect the power level or reactivity of a reactor shall only be accomplished with the knowledge and consent of an operator licensed in accordance with Part 55 010 CFR 50.54(j)o.

4. The NRC-licensed individual shall observe all applicable rules, regulations and orders of the Commission, whether or not stated in the license 010 CFR 55.31(d)o.
5. The operating test, to the extent applicable to the facility, requires the applicant to demonstrate an understanding of:

The necessity for a careful approach to the responsibility associated with the safe operation of the facility  
010 CFR 55.23(1)o.

6. In order for the operator at the controls of a nuclear power plant to be able to carry out these and other responsibilities in a timely fashion, he must give his attention to the condition of the plant at all times. He must be alert to ensure that the plant is operating safely and must be capable of taking action to prevent any progress toward a condition that might be unsafe (Regulatory Guide 1.114.B).

NRC policy regarding responsibility for safe operation of NRC-licensed facilities as stated in IE Information Notice 79-20, Revision 1, continues to be as follows:

1. "The facility licensee is responsible for assuring that the facility is operated safely and within the requirements of the license, technical specifications, rules, regulations, and Orders of the NRC, and for the actions of their on-duty employees while on site."
2. "NRC-licensed individuals are responsible for taking timely and proper actions that will not create or cause a hazard to 'safe operation of the facility' (i.e., actions or activities, including failure to take action, related to the facility that could have an adverse effect on the health and safety of the public, plant workers, or the individuals)."

Recommended Action for Licensee's Consideration:

Each power reactor licensee should review and revise, as necessary, their administrative controls regarding operator performance to ensure the guidance contained or referenced herein is incorporated. These administrative controls should prescribe performance requirements for licensed personnel and specify types of activities that are prohibited while licensed personnel are on duty. These administrative controls should be considered for applicability to other plant personnel whose actions, while on duty, may affect plant safety or the orderly conduct of facility operation. Licensees should assure dissemination of these administrative requirements to affected personnel.\* It is also requested that licensees have their licensed personnel review this Circular and IE Information Notice 79-20, Revision 1, as well as Regulatory Guide 1.114.

No written response to this Circular is required. If you require additional information regarding this matter, contact the Director of the appropriate NRC Regional Office.

\*A copy of this Circular was mailed directly to each licensed reactor operator and senior reactor operator.

RECENTLY ISSUED  
IE CIRCULARS

Circular No.	Subject	Date of Issue	Issued to
81-01	Design Problems Involving Indicating Pushbutton Switches Manufactured by Honeywell, Incorporated	1/23/81	All holders of a power reactor OL or CP
80-25	Case Histories of Radiography Events	12/5/80	All holders of a radiography license
80-24	AECL Teletherapy Unit Malfunctions	12/2/80	All holders of a teletherapy license
80-23	Potential Defects in Beloit Power Systems Emergency Generators	10/31/80	All holders of a power reactor OL or CP
80-22	Confirmation of Employee Qualifications	10/2/80	All holders of a power reactor OL or CP
80-21	Regulation of Refueling Crews	9/10/80	All holders of a power reactor OL or CP
80-20	Changes in Safe-Slab Tank Dimensions	8/21/80	All holders of a Part 50 or Part 70 Fuel Facility License
80-19	Noncompliance with Licensee Requirements	8/26/80	All holders of a medical license
80-18	10 CFR 50.59 Safety Evaluations for Changes to Radioactive Waste Treatment Systems	8/22/80	All holders of a power reactor OL or CP
80-17	Fuel Pin Damage Due to Water Jet from Baffle Plate Corner	7/23/80	All holders of a PWR power reactor OL or CP
80-16	Operational Deficiencies In Rosemount Model 510DU Trip Units And Model 1152 Pressure Transmitters	6/27/80	All holders of a power reactor OL or CP