



Rodney A. Erickson
Vice President for Research
Dean of the Graduate School

(814) 863-9580
Fax: (814) 863-9659
rae@psu.edu

The Pennsylvania State University
304 Old Main
University Park, PA 16802-1504

February 20, 1998

Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Re: Reportable Occurrence - TS 6.1.3.a (1)
License R-2, Docket No. 50-005

Dear Sir or Madame:

This report is being submitted in accordance with Sections 6.5.2 and 6.6.2 of the PSBR Technical Specifications (TS). Initial verbal notifications of this reportable occurrence were made to Richard Dudley of the Non-Power Reactors and Decommissioning Project Directorate and to Tom Dragoun, Region 1 on February 9, 1998. The telephone notifications were confirmed in writing that same day by copies faxed to Marvin Mendonca, PSBR Project Manager and to Tom Dragoun with mail copy to the Document Control Desk.

TS 6.1.3.a states in part: "The minimum staffing level when the reactor is not secured shall be: (1) A licensed operator present in the control room, in accordance with applicable regulations."

Description of Event:

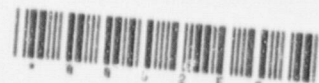
On February 9, 1998 at approximately 9:35 AM, the duty SRO and an operator trainee were conducting Monday morning critical rod positions. The reactor power had been steady for several minutes at 50 watts; the reactor was in automatic control; and the trainee was recording hourly readings. A second SRO entered the control room to gather some information from the trainee regarding his type of dosimetry. At this point, the duty SRO asked the second SRO to momentarily take over while he performed a filter change for an air monitor in the reactor bay, about 20 feet outside the control room. The second SRO agreed and the duty SRO left the control room. The second SRC held a brief discussion with the trainee, acquired the desired information from the trainee and then walked out of the control room leaving the trainee alone at the console. The duty SRO was returning to the control room, observed the departure and immediately re-entered the control room. The elapsed time of the violation is estimated to be no more than five (5) seconds.

16
1002

The duty SRO paged the second SRO to the control room to inform him of his error; the second SRO had just realized what he had done and was already returning to the control room. The second SRO realized that a violation of the TS had occurred and reported the incident to the RSEC Director.

An Equal Opportunity University 40121

9802240321 980220
PDR ADOCK 0500005
S PDR



Review of the Event:

The three individuals involved were interviewed by the Director. Based on that initial review of the event, two performance issues were identified. 1) The lack of a formal turnover between the two SROs and 2) inattention on the part of the second SRO. Further interviews, counseling, and self-assessments by the three individuals involved confirmed these issues; further they confirmed that the requirements of TS 6.1.3.a.(1) were fully understood.

When the second SRO entered the control room he was focused on completing a number of administrative matters which included modifying the dosimetry currently issued to several operations personnel of whom the trainee was one. He fully understood he had been requested to act as the SRO while the duty SRO left the control room and he verbally accepted the SRO responsibilities. Rather than changing his full attention and focus to the operation of the reactor, he pursued acquiring the needed information regarding dosimetry from the trainee, and then with that original task completed, left the control room. The trainee, after answering the SRO's questions, returned his attention to the console and the hourly readings and did not notice the second SRO's departure until he heard the bay door close and saw the duty SRO re-entering the control room.

The second SRO was fully aware of the evolution in progress, since this was a routine Monday morning training session and critical rod position data gathering. Despite this knowledge, the turnover should have involved a status briefing to ensure that the second SRO was aware of reactor status. Since this was a momentary SRO coverage, there was no formal turnover of the duty and no logbook entries were made. Thus, there was neither a detailed verbal interchange nor a specific physical action which would help change the focus of the second SRO from his original intent to the responsibilities of reactor operation.

Upon receiving a verbal acceptance of the duty by the second SRO, the regular duty SRO correctly assumed he was temporarily relieved to perform the intended work outside the control room. However, the duty SRO should not have allowed himself to be diverted from his primary duty of reactor supervision and operation. The work of changing the air monitor filter could have been done during the morning checkout walkaround or by requesting the trainee, the second SRO or the third person on shift to perform the filter change. Both SROs thus allowed themselves to be diverted from their primary focus on assuring safe reactor operation.

Both SROs involved are noted for their high level of attention to detail and conformance with procedures. In this isolated case, each allowed themselves to have their attention diverted from their primary role as licensed operators.

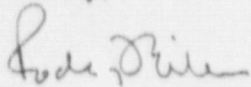
Corrective and Preventative Actions:

The RSEC Director met with the two SROs and provided counseling as to their duties and responsibilities as licensed operators. Changes are being made to the reactor operating procedures which will enhance the turnover process between operators. These changes will be completed by February 27th. Training was conducted for all licensed personnel as well as trainees regarding these changes. Discussions during this training emphasized the need for formal briefing and turnover of operator or supervisor responsibilities even for short intervals of time. Emphasis was given to the need for operators to focus their full attention to safe operation in compliance with the letter and the intent of the regulations, the license, Technical Specifications, and PSBR procedures while on duty. The staff exchanged ideas on how they could help each other achieve the needed focus.

Nuclear Regulatory Commission
Page 3
February 20, 1998
ldb4005.98

If you have any questions regarding this matter, please call Dr. Sears at (814) 865-6351.

Sincerely,



Dr. Rodney A. Erickson
Vice President for Research
Dean of the Graduate School

RAE:CFS/ldb4005.98

cc: T. Dragoun (NRC Region 1)
M. Mendonca (NRC Headquarters)
J. M. Mason (College of Engineering, Assoc. Dean of Research)
G. J. McMurtry (College of Engineering Assoc. Dean)
E. H. Klevans (NucE Department Head)
W. F. Witzig (PSRSC Chairman)
C. F. Sears (RSEC Director)
T. L. Flinchbaugh (Manager of Operations and Training)

Subscribed to the sworn before me on this 20th day of February, 1998,
Notary Public in and for Centre County, Pennsylvania.

