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

August 18, 2000

NRC REGULATORY ISSUE SUMMARY 2000-13 ANNUAL REPORT ON THE EFFECTIVENESS OF TRAINING IN THE NUCLEAR INDUSTRY FOR CALENDAR YEAR 1999

ADDRESSEES

All holders of operating licenses for nuclear power reactors.

INTENT

The U.S. Nuclear Regulatory Commission (NRC) is issuing this regulatory issue summary (RIS) to inform the addressees of the availability of the NRC's "Annual Report on the Effectiveness of Training in the Nuclear Industry for Calendar Year 1999" and to provide some insights from the information contained in the report. This RIS does not create any new or changed NRC requirements or staff positions, and it requires no specific action or written response.

BACKGROUND INFORMATION

Public health and safety depend on the proper operation, testing, and maintenance of nuclear power plant systems and components by plant personnel. Successful performance by nuclear power plant personnel is reasonably assured by having workers achieve and maintain job task qualifications through the systems approach to training (SAT-based training) and the continuous retraining required by 10 CFR Part 55 and 10 CFR 50.120. Favorable job performance and successful SAT implementation provide a reasonable assurance that the training of nuclear power plant workers is sufficient to maintain public health and safety.

The NRC monitored training-related activities in 1999 as indicators of worker performance and SAT implementation. The NRC monitored worker performance by reviewing licensee event reports (LERs) and inspection reports for training-related issues; inspecting training programs when an appropriate reason was identified; and administering, inspecting, and reviewing the results of operator licensing activities. The NRC also indirectly monitored SAT use by reviewing the effectiveness of the accreditation process administered by the Institute of Nuclear Power Operations. These activities provide an efficient and effective assessment of industry activities with a minimal impact on licensees. Although each activity can provide plant-specific information, the information is used in the composite within the annual report to assess the overall effectiveness of training in the nuclear industry.

ML003719812

The full text of the “Annual Report on the Effectiveness of Training in the Nuclear Industry for Calendar Year 1999" can be located in the Agencywide Documents Access and Management System (ADAMS) at ML003705668.

SUMMARY OF ISSUE

An analysis of the training-related information contained in inspection reports and LERs indicated that training-related issues identified in 1999 were concentrated in two distinct areas: “Training less than adequate (LTA)”[1] and “Individual knowledge less than adequate (LTA)”[2]. While training-related issues have been concentrated in these same two areas since 1997, the 1999 information shows a decrease in the number of issues attributed to Training LTA and a contrasting increase in the number of issues attributed to Individual knowledge LTA. The 1999 information suggests that the causes of poor performance appear to be becoming more often attributed to the individual rather than to a group or a class of workers. The increasing trend in the number of issues attributed to Individual knowledge LTA does not appear to be an issue in and of itself but rather appears to signal a change in emphasis within licensee problem identification and corrective action programs.

A shift in focus from the training program to individual performance, however, should correspondingly also be reflected in the implementation of the SAT. Successful use of SAT requires that individual knowledge deficiencies be assessed during the program evaluation phase to determine if the group of individual performance issues indicates problems with the overall effectiveness of the training program. Corrective actions focused on separate individual performance deficiencies are likely to successfully address the immediate problem. However, incomplete evaluation of the group of individual performance problems within a training program is likely to be the cause of any ongoing increases in the number of performance problems attributed to insufficient individual knowledge. Therefore, an increase in the number of individual performance problems may signal a problem with the use of SAT in the area of training program evaluation.

Training program evaluation problems have been documented as a weakness during NRC for-cause inspections of training over the past four years and continued to challenge the industry in 1999. Licensees should understand the link between individual performance and training program evaluation in order to minimize the possibility that training program deficiencies will go uncorrected and will contribute to risk-significant operational events.

BACKFIT DISCUSSION

This RIS does not request any action or written response; therefore, the staff did not perform a backfit analysis.

[1]Training was provided and was attended by the worker, but the content of the training was incorrect or incomplete.

[2]Complete and accurate training was received by the worker, but the worker was unable to perform successfully on the job.

FEDERAL REGISTER NOTIFICATION

A notice of opportunity for public comment on this RIS was not published in the *Federal Register* because this RIS is informational only.

PAPERWORK REDUCTION ACT STATEMENT

This RIS does not request any information collection.

If there is any question about this RIS, please contact the person listed below.

/RA/Charles E. Ader For

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Attachment: List of Recently Issued NRC Regulatory Issue Summaries

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LIST OF RECENTLY ISSUED
NRC REGULATORY ISSUE SUMMARIES

Regulatory Issue Summary No.	Subject	Date of Issuance	Issued to
2000-12	Resolution of Generic Safety Issue B-55, "Improved Reliability of Target Rock Safety Relief Valves"	08/07/2000	All holders of OLs for nuclear power reactors, except those licensees who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel
2000-11	NRC Emergency Telecommunications System	06/30/2000	All holders of Ols for nuclear power reactors
2000-10	Technical Information to Facilitate Public Access to the U.S. NRC Agencywide Documents Access and Management System (ADAMS)	06/30/2000	All NRC licensees
2000-09	Standard Review Plan for Licensee Requests to Extend the Time Periods Established for Initiation of Decommissioning Activities	06/28/2000	All material licensees regulated in accordance with 10 CFR parts 30, 40, and 70
2000-08	Voluntary Submission of Performance Indicator Data	03/29/2000	All holders of OLs for nuclear power reactors, except for those licensees who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel
2000-07	Use of Risk-Informed Decisionmaking in License Amendment Reviews	03/28/2000	All holders of OLs for nuclear power reactors, except for those licensees who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel

OL = Operating License
CP = Construction Permit