

April 3, 1996

FOR: The Commissioners
 FROM: James M. Taylor /s/
 Executive Director for Operations
 SUBJECT: STATUS OF ACTION PLAN FOR REGULATING FUEL CYCLE FACILITIES

- **PURPOSE:**
- **BACKGROUND:**
- **DISCUSSION:**
 - License Renewal Program
 - Inspection Program
 - Training Program
 - Future Annual Status Reports

PURPOSE:

To provide the Commission with an update of the progress that has been made in implementing the action plan for correcting weaknesses in the fuel cycle facilities safety program. The status of these activities was last discussed with the Commission in a briefing on March 22, 1995.

BACKGROUND:

The June 7, 1993, Staff Requirements Memorandum noted that the Commission endorsed the action plan presented in SECY 93-128, "Status of Action Plan for Regulating Fuel Cycle Facilities." This action plan was based on the recommendations in NUREG-1324, "Proposed Methods for Regulating Major Materials Licensees," for correcting weaknesses in the regulation of fuel cycle facilities. The action plan addresses five major programs: regulatory development, license renewal, inspection, staff training, and licensee self-assessment. Meeting the schedule for the action plan has continued to receive high-priority attention and a commitment of staff resources and technical assistance contracts. This information paper provides the current status of the license renewal, inspection, and training programs. After further review, the staff has determined that a licensee self-assessment program with teams comprised of representatives from each licensee is not viable because of the uniqueness of each fuel cycle facility and the competitive business environment among licensees. The current status of the regulatory development program is addressed in a separate Options Paper.

DISCUSSION:

License Renewal Program

The current goal in the action plan is to complete the renewal of licenses for major fuel cycle facilities by the end of fiscal year 1997. Staff, with the cooperation of the licensees, continues to aggressively complete license renewals. The schedule, to date, for the renewal of the seven major fuel cycle licensees has been accomplished by completing one license renewal in fiscal year 1994, one in fiscal year 1995, and two in fiscal year 1996. Of the remaining three licensees in timely renewal, one is scheduled for renewal this fiscal year (1996); one is scheduled for fiscal year 1997; and the remaining facility, which is now downgrading its license to remove authorization for fuel fabrication activities, has requested a possession-only license, and, therefore, will not be renewed as a fuel fabrication facility.

In addition to renewal of licenses for major fuel cycle facilities, the staff continues to complete the renewals of other licenses (not major fuel cycle licenses) in timely renewal. Eleven of these licenses have been renewed since 1993. In addition, one facility in timely renewal has been transferred to the Waste Management Division for decommissioning; one licensee's activities conducted under two licenses were combined into one license; two licenses have been terminated; and one other was transferred to Region I to be regulated under 10 CFR Part 30. The current backlog, with the exception of the two fuel facilities scheduled for renewal in fiscal years 1996 and 1997, now consists of four, one in process and three with extensive environmental decommissioning issues that delay the staff's ability to issue a license renewal.

Although the license renewal activity is occurring concurrently with possible revisions to [10 CFR Part 70](#) that could ultimately affect the license-renewal process, license renewals are being approved under existing regulations. The staff is continuing to encourage licensees to follow, when possible, draft Standard Review Plan guidance, to provide improved Nuclear Regulatory Commission confidence in the safety of these facilities and to minimize the modifications to current licenses if a new Part 70 Rule is implemented. In some cases, where this has proven to be impractical or objectionable to the licensee, this approach was not used. Consequently, those renewals are granted for a more limited time period (5-year, rather than 10-year period) and may result in licensees having to substantially upgrade their licenses if Part 70 is revised.

Inspection Program

The Materials Regulatory Review Task Force recommended, in NUREG-1324, that Inspection Manual Chapters and procedures should be revised to address managerial controls, criticality safety, chemical safety, fire protection, and accident analyses. As part of the NMSS reorganization in February 1993, an Inspection Section was formed in the Division of Fuel Cycle Safety and Safeguards (FCSS). This section's mission includes performing enhanced chemical and criticality safety inspections. The section also performs material control and accounting inspections.

Emphasis has been placed on refining the inspection procedures for nuclear criticality safety (NCS) inspections and developing procedures for chemical process safety. FCSS has initiated refinement of the existing NCS inspection procedures. This revision of NCS inspection procedures will identify those areas of criticality safety that will be verified by Headquarters and/or regional staff.

Chemical process safety inspection procedures, covering chemical safety issues consistent with the Memorandum of Understanding between the NRC and the Occupational Safety and Health Administration, have been developed, issued, and implemented as part of the fuel cycle inspection program. This activity has been completed.

Training Program

NUREG-1324 recommended improvements in training NRC fuel cycle licensing and inspection staff in areas where facility weaknesses had contributed to past safety problems. To enhance the licensing and inspection staffs' understanding of the technology associated with these matters, courses have been identified as part of the overall training curriculum. These courses include criticality safety, sampling and measurement, mechanical and chemical process hazards, hazards analysis, fire protection, and management systems and structures.

Since the fall of 1993, NMSS has been working with NRC's Technical Training Division (TTD) to produce an integrated system of fuel cycle courses. To date, with TTD support, two existing courses have been revised, three courses have been developed, and two are under development. The following courses have been conducted: "Fuel Cycle Technology," "Nuclear Criticality Safety," "Hazards of Chemical and Mechanical Fuel Cycle Processes," and "Mechanics of Sampling and Measurement." One of the courses developed, "Introduction to Criticality Safety," has not been conducted. The two courses currently under development, "General Health Physics for Fuel Cycle Facilities" and "Fire Protection for Fuel Cycle Facilities," are scheduled to be conducted June 24-27, 1996, and August 13-15, 1996, respectively. The current plan is to use an existing commercial training course on hazards analysis instead of NRC developing its own course. Staff has completed development of the last remaining course, "Management Systems and Structures for Fuel Cycle Safety." Actions are currently underway to issue a contract that will provide technical assistance to the staff in presenting this course.

In parallel with the above activities, efforts are underway to complete revision of Inspection Manual Chapter 1246, which specifies the training requirements (including mandatory attendance of selected courses) for fuel cycle inspectors and license reviewers. These revisions, expected to be completed this spring, are necessary to ensure that sufficient time is allotted for employees to qualify.

Future Annual Status Reports

The five major programs addressed in the 1993 fuel cycle action plan were regulatory development, license renewal, inspection, staff training, and licensee self-assessment. As indicated in the foregoing discussion, the programs related to license renewal, inspection, and staff training are well established and will soon have accomplished all of their goals. Effort to develop a licensee self-assessment program, as previously reported, has been discontinued. The only remaining program is that relating to improving the basis for regulating major fuel fabrication facilities, which will be addressed in a separate paper to the Commission. Therefore, with all the actions either closed or in the process of being implemented, the staff plans to discontinue the annual reporting to the Commission on the status of the "Action Plan for Regulating Fuel Cycle Facilities."

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