



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
799 ROOSEVELT ROAD  
GLEN ELLYN, ILLINOIS 60137-5927

R3/e1-6  
12-17-93

DEC 17 1993

R

MEMORANDUM FOR: Robert W. DeFayette, Director, Enforcement and Inspection  
Coordination Staff

FROM: Gary L. Shear, Chief, Fuel Cycle and Decommissioning Branch

SUBJECT: ALLEGATION FOLLOWUP COMBUSTION ENGINEERING LICENSE  
NO. SNM-33, DOCKET NO. 070-00036 A.M.S. NO. RIII-93-A-0137

On November 30 - December 2, 1993, a special inspection was conducted at the subject licensee's Nuclear Fuel Facility, in Hematite, Missouri. Included in the inspection was a review of an allegation that was received by our office via telephone on September 21, 1993. The allegation pertained to plant workers working long hours, weekends, and more than 50 consecutive calendar days which could lead to a criticality accident or other safety concern.

This allegation was documented in an allegation plan and was discussed on November 1, 1993, during the allegation review board. Described below is our follow-up to this allegation.

**Allegation:** A friend/relative of a CE Hematite worker was informed that plant workers are working long hours, weekends, and more than 50 consecutive calendar days. He is concerned that the stress and fatigue of the workers may lead to a criticality incident or other safety concern.

The individual asked about a regulation (47 CFR 7352) which prohibits employers from overworking employees and he wanted to know whether or not the regulation applied to the plant.

**NRC Followup:** In preparation for the inspection, a review of the referenced 47 CFR 73.52 was conducted. 47 CFR Parts 70-79 deals with telecommunications. 47 CFR 73.52 specifically addresses Educational and Information programming for children on non-commercial television.

The inspector believes that the reference to working hours the individual was referring to is 47 FR 7352 which is a Federal Register NRC Policy Statement regarding "Nuclear Power Plant Working Hours" dated December 18, 1982. This Policy Statement is not a requirement and was addressed to nuclear power reactors. The Policy Statement suggests the following: (1) An individual shall not be permitted to work more than 16 hours straight. (2) An individual shall not be

P-2

DEC 17 1993

permitted to work more than 16 hours in any 24 hour period, nor more than 24 hours in any 48 hour period, nor more than 72 hours in any 7 day period. (3) A break of at least 8 hours should be allowed between work periods. (4) The use of overtime should be considered on an individual basis and not for the entire staff on a shift. This guidance, which was intended for power reactor personnel, is also identified in NUREG-0737, IE Circular 80-02 and ANS-3.2 dated 1982. Prior to the inspection, the inspector spoke with the alleged and explained that there is no regulatory requirement which governs overtime but that we would review his concern against the existing guidance for power reactors.

Between November 30 and December 2, 1993, the inspectors toured the facility and conducted selective interviews with available management and non-management personnel. In addition, payroll records for union and non-union personnel were reviewed for calendar year 1993.

A review of the AGREEMENT between Nuclear Fuel Manufacturing-Windsor of C.E. Nuclear Power, Combustion Engineering, Inc. and International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers of America and Local Union No. 688, Hematite, Missouri, dated 1990-1993 identifies in Article 14.0 entitled, "Hours and Overtime" that the Company may require overtime work when, in its judgement, production schedules warrant. Article 15.0 entitled, "Assignment of Overtime" requires that overtime be distributed among qualified employees on a shift in a manner directed at achieving reasonable equalization of overtime consistent with sound business judgement and operational requirements.

Overtime work is usually voluntary except when there is not enough volunteers, then workers may be forced to work according to the Union Agreement.

Interviews with management personnel showed that overtime is routinely worked to fill and ship commitments. There are peak times during the year that require overtime. Slow periods may require a lay-off or vacation. Review of records indicates that the Union Agreement is being followed.

Interviews with available Supervisors, Quality Control Technicians, Health Physics Technicians, Operators and Administrative personnel showed that it is common knowledge

DEC 17 1993

that, during peak periods, overtime work is expected and generally welcomed by most personnel. This practice was well understood by all personnel and has been in effect for many years.

A selective examination of payroll overtime records for calendar year 1993 showed that an average of 33 percent overtime was worked. Most individuals worked 8 hours a day, six or seven days a week and averaged between 48 and 56 hours per week. Some workers worked 12 hours per day for six or seven days and averaged between 72 and 84 hours per week. The 72 to 84 hour weeks were rare and were not for extended periods of time and the individuals volunteered for the overtime. There is no company policy on overtime, the Plant Manager has enforced his own policy that overtime is limited to a maximum of 12 hours per day.

The inspectors found no indications that any individual worked in excess of 12 hours per day. Some individuals worked many consecutive days without a day off, but they were usually 8 hour work days and a few people did work 50 consecutive days, but they were voluntary. There was no indication that employees felt overworked, stressed or fatigued. There appeared to be sufficient management oversight and quality assurance checks which would identify poor work products which would be an indication of fatigue. There have been no criticality accidents or any health safety concerns relating to fatigue or excessive overtime.

Further review showed that there was about a 100 % increase in staff size during 1993 compared to 1992 and there was a significant reduction of lost work days due to injuries during 1993. This appears to be another indication that individuals are not overworked or fatigued and are well supervised. The inspectors informed the licensee of the overtime guidance for power reactor personnel and the licensee agreed to review the guidance.

**CONCLUSION:**

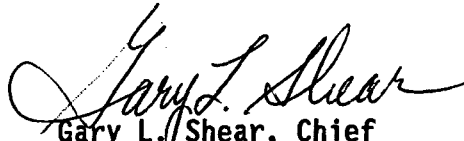
The allegation was partially substantiated. Individuals at peak times during the year did work some overtime that included weekends and a few individuals did work 50 consecutive days, but the work was voluntary. The overtime did not appear to be stressful or to overly fatigue the majority of workers. There appeared to be at least 12 hours between work shifts and overtime was kept to a maximum 12 hours per day. There is no NRC requirement which governs overtime and this licensee is not committed to overtime guidance which was intended for the power reactor workers. No violations related to the allegation were identified. The licensee appears to be meeting the Union Agreement for assignment of overtime and there is no indication that overtime has had an impact on safety.

Robert W. DeFayette

4

DEC 17 1993

There will be no further action on our part regarding this allegation and we consider this allegation closed.



Gary L. Shear, Chief  
Fuel Cycle and Decommissioning Branch

cc: W. L. Axelson  
D. Funk  
Docket/License File  
No. 070-00036/SNM-33