



**Commonwealth Edison**

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July 5, 1988

Mr. A. B. Davis  
Regional Administrator  
U.S. Nuclear Regulatory Commission  
Region III  
799 Roosevelt Road  
Glen Ellyn, IL 60137

Subject: Dresden Nuclear Power Station Units 2 and 3  
Rad/Chem Technician Work Hours  
NRC Docket Nos. 50-237 and 50-249

References (a): W. D. Shafer letter to Cordell Reed dated  
May 18, 1988 transmitting Inspection Report  
50-237/88009; 50-249/88011.

(b): L. J. Cunningham letter to W. D. Shafer dated  
April 1, 1988, "Applicability of Generic  
Letter 82-12 to Radiation Protection Staff."

[See Attachment II for 16 Additional  
References]

Dear Mr. Davis:

The purpose of this letter is to respond to Reference (a), which  
stated:

"During this inspection, the inspectors found that you do  
not meet the intent of Generic Letter 82-12 requirements  
for limiting Rad/Chem Technician hours of work to assure  
that, to the extent practicable, personnel are not assigned  
to shift duties while in a fatigued condition that would  
reduce their mental alertness or their decision making  
capability. Please advise NRC Region III by letter, within  
45 days of the date of this letter, how you intend to meet  
the intent of the generic letter in the future."

In order to adequately address this subject, it is first appropriate  
to review the history behind Generic Letter 82-12, the commitments made by  
Commonwealth Edison, and the written agreement by the US NRC that those  
commitments are acceptable. Attachment I provides such a review based on  
sixteen previous CECO and NRC documents which are listed in Attachment II.

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Attachment I also provides background regarding the Commonwealth Edison interpretation on applicability of GL 82-12 to the Technical Specification required Rad/Chem Technician.

The actions currently being taken at Dresden are addressed in Attachment III as well as our plans once the functional split is implemented to separate the RCT duties into two job categories.

Should your Staff have any remaining concerns after reviewing the enclosed historical background and the program outlined in Attachment III, we would be happy to meet with you at your convenience. Prior to further discussions, however, it would be very beneficial for CECo to receive additional information (identified in Attachment IV) in order to fully understand the details and basis of the Region's concerns.

If there are any questions in this matter, please contact this office.

Very truly yours,

*for* Michael S. Turbok  
Henry E. Bliss  
Nuclear Licensing Manager

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Attachments (4)

cc: B.L. Siegel - Project Manager, NRR  
S.G. DuPont - Senior Resident Inspector, Dresden

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## ATTACHMENT I

### A. Background, Commitments, and NRC Concurrence

References (c), (d), (e), (f), (g) and (h) substantially represent the evolution of Shift Staffing Requirements by the NRC. As early as References (c) and (d), the basic concepts were formulated and were actually relaxed in later revisions. Reference (f) added applicability as follows:

"These administrative procedures shall also set forth a policy, the objective of which is to operate the plant with the required staff and develop working schedules such that use of overtime is avoided, to the extent practicable, for the plant staff who perform safety-related functions (e.g. senior reactor operators, health physicists, auxiliary operators, I&C technicians and key maintenance personnel)."

References (i), (j), (k), (l), (m), and (o) provide the evolution of Commonwealth Edison's response and commitments to Shift Staffing Requirements at Dresden Station in response to the NRC initiatives. Reference (o) provided the following succinct summary for Dresden:

"We are in substantial compliance with both the NUREG 0737 and Generic Letter 82-02 requirements. The subject overtime limitation for the Shift Engineer, Shift Foreman, Station Control Room Engineer and the Nuclear Station Operator is administratively covered by procedure. For the additional job classifications identified in the NUREG and Generic Letter, Dresden maintains a sufficient number of personnel such that overtime, even for extended outages, is not routinely scheduled to extend beyond a 12 hour shift. Per the November 10, 1981 letter from T. A. Ippolito to L. DelGeorge, the NRC Staff has found that our previous correspondence adequately addresses the shift manning overtime limit requirements. This item is considered complete."

Reference (n) is the T. A. Ippolito to L. DelGeorge letter dated November 10, 1981 which accepted the Dresden position as follows:

"We have completed our review of your submittals concerning subject TMI Action Plan items for the Dresden Nuclear Power Station, Units 2 and 3. Our conclusions on each item are as follows:

Item No. I.A.1.s(1) - Shift Manning Overtime Limits

This item defined shift manning requirements for normal operation. In addition, a letter dated July 31, 1980 from D. G. Eisenhut to all power reactor licensees and applicants set forth the interim criteria for shift staffing and overtime restrictions.

By letters dated November 5 and December 15, 1980 and January 30 and April 1, 1981, CECO responded to this item and described the actions taken in response to the stated requirements. The actions consisted of changes to corporate policy guidelines and administrative procedures. In addition, you took exception to certain requirements and provided justification for the exceptions.

We have reviewed the above submittals and have determined that your actions adequately address the shift manning overtime limit requirements.

We have also reviewed the exceptions noted by you and find the reasons for the exceptions to be justified. Based on this review, we find that your response to Item No. I.A.1.3(1) is acceptable."

Similar acceptance letters were received for Zion (from S. Varga dated January 12, 1982) and for Quad Cities (from D. Vassallo dated March 23, 1982).

NRC further indicated their ongoing concurrence with limiting application of the guidelines to the Shift Engineer, Station Control Room Engineer, Shift Foreman, and Nuclear Station Operator job classifications by the issuance of References (p) and (q) which required:

"6.2 Plant Operating Procedures

A. Detailed written procedures including applicable checkoff lists covering items listed below shall be prepared, approved, and adhered to:

14. Working hours of the Shift Engineer, Station Control Room Engineer, Shift Foreman, Nuclear Station Operator job classifications such that the heavy use of overtime is not routinely required."

In summary, Commonwealth Edison agrees with the Reference (a) Inspection Report statement that:

"The licensee further stated that they have no system in place to track/project individual RCT duties to determine for whom working hour limits should apply because of their applicable routine or emergency duties."

As discussed above, such a system was not required by the NRC.

B. Applicability to the Duty (Tech Spec Required) Rad/Chem Technician

In the Inspection Report, Section 12, transmitted by Reference (a), the inspectors stated:

"According to the licensee, they had interpreted the generic letter requirements to pertain only to the one RCT position (on each shift) listed in Technical Specification Table 6.1.1, Minimum Manning Chart."

We wish to make clear the evolution of this Commonwealth Edison position. During the initial and full power licensing of LaSalle County Station Unit 1 in Spring/Summer of 1982, shift staffing work hour requirements were being implemented and LaSalle was one of, if not the first, station to have such requirements imposed in its Technical Specifications. During the licensing process, Reference (r) was submitted to assure proper interpretation of the Technical Specifications. Reference (r) states, in part:

"For clarification purposes, Commonwealth Edison Company has determined that the positions for which these restrictions apply are as follows:

....

Health Physicists - Individual fulfilling the position designated as health physics technician in Technical Specification Section 6.1.C.2 (Also known as Rad/Chem technician in Commonwealth Edison stations)..."

We believe that the NRC found this definition acceptable and LaSalle Unit 1 was used as a basis for Commonwealth Edison's new stations.

## ATTACHMENT II

### ADDITIONAL REFERENCES

- References (c): US NRC I.E. Circular No. 80-02 dated February 1, 1980, "Nuclear Power Plant Staff Work Hours."
- (d): D. G. Eisenhut letter to All Licensees and Applicants dated July 31, 1980, Generic Letter 80-29, "Interim Criteria for Shift Staffing."
- (e): D. G. Eisenhut letter to All Licensees and Applicants dated October 31, 1980, Generic Letter 80-40, "Post-TMI Requirements" which transmitted NUREG 0737, including section I.A.1.3 Shift Manning.
- (f): D. G. Eisenhut letter to All Licensees and Applicants dated February 8, 1982, Generic Letter 82-02, "Nuclear Power Plant Staff Working Hours" which transmitted "Policy on Factors Causing Fatigue of Operating Personnel at Nuclear Reactors."
- (g): D. G. Eisenhut letter to All Licensees and Applicants dated June 15, 1982, Generic Letter 82-12, "Nuclear Power Plant Staff Working Hours", which transmitted revised pages of NUREG 0737 section I.A.1.3 Shift Manning, and "Policy on Factors Causing Fatigue of Operating Personnel at Nuclear Reactors."
- (h): D. G. Eisenhut letter to All Licensees and Applicants dated March 7, 1983, Generic Letter 83-14, "Definition of 'Key Maintenance Personnel' (Clarification of Generic Letter 82-12)."
- (i): R. F. Janacek letter to D. G. Eisenhut dated November 5, 1980, "Response to NRC Request Concerning Interim Criteria for Shift Staffing."
- (j): J. S. Abel letter to D. G. Eisenhut dated December 15, 1980, "Confirmation of NUREG-0737 Implementation Dates and Justification for Delays."
- (k): J. S. Abel letter to D. G. Eisenhut dated January 30, 1981, "Supplemental Information Concerning Shift Overtime, NUREG 0737 Item I.A.1.3."
- (l): J. S. Abel letter to D.G. Eisenhut dated April 1, 1981, "Information Concerning NUREG-0737 Items With Submittals Due by April 1, 1981."

REFERENCES

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- (m): J. S. Abel letter to D.G. Eisenhut dated May 29, 1981, "Supplemental Response to NUREG 0737 Concerning Shift Overtime."
- (n): T. A. Ippolito letter to L. DelGeorge dated November 10, 1981 "TMI Action Plan Items I.A.1.3(1), I.C.5, and I.C.6 As Described in NUREG-0737."
- (o): E. D. Swartz letter to D.G. Eisenhut dated June 4, 1982, "Response to Generic Letter 82-10 Concerning Various NUREG 0737 Items."
- (p): Amendment No. 86 to Dresden Unit 2 Technical Specifications, Item 6.2.A.14, issued March 20, 1985.
- (q): Amendment No. 79 to Dresden Unit 3 Technical Specifications, Item 6.2.A.14, issued March 20, 1985.
- (r): C. W. Schroeder letter to A. Schwencer dated May 4, 1982, "LaSalle County Station Units 1 and 2 Interpretation of Technical Specifications-Plant Staff Working Hours."

### ATTACHMENT III

#### CONTROL OF OVERTIME FOR RAD/CHEM TECHNICIANS

During the recently concluded Dresden Unit 3 refuel outage, Radiation/Chemistry Technicians did work substantial overtime, as indicated in Reference (a), Inspection Report, Section 12. Now that the outage has been concluded, overtime has been substantially reduced.

In order to assure that we continue to comply with our commitment in the future, we propose to implement the following program prior to the start of our next refueling outage (Unit 2 scheduled for October 29, 1988):

1. The overtime guidelines of Generic Letter 82-12 will be applied to the duty Rad/Chem Technician. Specifically, the following guidelines shall be followed:
  - "a. An individual should not be permitted to work more than 16 hours straight (excluding shift turnover time).
  - b. An individual should not be 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 seven day period (all excluding shift turnover time).
  - c. A break of at least eight hours should be allowed between work periods (including shift turnover time).
  - d. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on shift.

Recognizing that very unusual circumstances may arise requiring deviation from the above guidelines, such deviation shall be authorized by the plant manager or his deputy, or higher levels of management. The paramount consideration in such authorization shall be that significant reductions in the effectiveness of operating personnel would be highly unlikely. Authorized deviations to the working hour guidelines shall be documented and available for NRC review."

This will assure that an individual to whom the guidelines are applied is available on-shift to perform safety-related or emergency response activities.

2. It is currently anticipated that later this year (no later than 1st quarter, 1989), the Rad/Chem Technician position will be separated into two job categories, Radiation Protection Technician and Chemistry Technician. Both of these positions will be staffed 24 hours per day, seven days a week. Upon implementation of this functional split, there will be a "duty" position in each job category on each shift. The above guidelines will be applied to each of these "duty" positions.



Att. III

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3. A specific review to identify the very limited population of routine safety-related duties of Rad/Chem Technicians will be performed and documented. Such duties will be assigned to Technicians to whom the above guidelines are applied.

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ATTACHMENT IV

Request for Additional Information

Reference (b) is an internal NRC memorandum. Its introduction states:

"This memorandum responds to your March 2, 1988 memorandum request for assistance in resolving the subject issue (copy enclosed). We have reviewed the issue and recent enforcement actions taken in this area by Region V."

In order for Commonwealth Edison to more fully assess and address any further concerns that NRC Region III may have, it would be useful to have the following information:

1. The March 2, 1988 memorandum request. This will allow us to understand the circumstances under which this clarification was requested and the underlying issues.
2. Information regarding the referenced recent enforcement actions taken in Region V.
3. Information regarding the broadening of the Generic Letter 82-12 words "health physicist" to "health physics (and chemistry)" as stated in Reference (b) and an apparently new set of requirements, namely:

"Personnel who are assigned certain emergency response duties including assignment to in-plant rescue teams, environmental monitoring and dose calculations, or who handle, process or provide data and input to emergency response decision makers (e.g., at the Emergency Operations Facility or Technical Support Center)."

4. The status of Reference (b) in the regulatory review process. Specifically, has it received review by the Committee to Review Generic Requirements (CRGR) and is it being promulgated to all licensees?