



Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

May 11, 1990

Dr. Thomas E. Murley, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attn: USNRC Document Control Room

Subject: Dresden Station Nuclear Power Units 2 and 3
DCRDR Commitment to Reduce
Control Room Meter Glare
HED Indexes 229 and 104
NRC Docket Nos. 50-237 and 50-249

- References: (a) Conference Calls between CECO (J. Silady
B. Zank, R. Christensen et al.)
and NRC (P. Eng, J. Bongarra) on
April 25, 1990 and May 4, 1990
- (b) Letter from J.A. Silady to T.E. Murley
dated March 13, 1990 concerning Status
of Dresden DCRDR Modifications.

Dear Dr. Murley:

In the Reference (a) conference calls Commonwealth Edison discussed the status and plan for resolution of the subject Detailed Control Room Design Review (DCRDR) Human Engineering Deficiency (HED). The following discussion summarizes the referenced call and the status of efforts being taken to close out the subject HED.

BACKGROUND

This HED involves glare that exists on the upper one third portion of approximately 90 meters associated with the 902(3)-6 and 7 panels. Generally the upper one third of these meters is not the normal operating range and in every case the meters are currently easily readable. In addition none of these instruments are vital for emergency operation. The HED is classified as Category/Level 2C as described in the DCRDR Final Summary Report.

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In Reference (b) CECo proposed to install small aluminum hoods above the affected meters by the end of April, 1990 to reduce the glare. However, a lack of documentation for utilizing two faced tape for hood installation would have required the hood application design to utilize screws. This option was subsequently rejected by the station since it required drilling into the control room panels during normal operation which creates several potential concerns.

In light of these problems Dresden began pursuing alternate solutions to glare reduction, which were discussed with your staff in late April. The referenced conference calls updated the staff on these efforts including CECo's proposed HED resolution and projected completion date, which are documented below as requested.

PROPOSED RESOLUTION AND SCHEDULE

After exploring options involving non-glare coatings for the meter faces, it was decided that Dresden Station will install hoods above the affected meters to reduce the glare and close out the HED. The hoods will be in place by May 31, 1990. Application of the hoods will utilize a higher grade of two-faced tape which was previously unknown to CECo Engineering but was recently identified in discussions with 3M Company. The tape was found to have adequate documentation for use in this application. The manufacturer's test documentation, together with the tape's characteristic of increasing adhesiveness over time, forms the basis for its use. Because the hoods are very thin, light-weight strips of aluminum, no problems are anticipated with either the reliability/durability of this installation method or with potential consequences should a hood become loose and fall onto the control panel below it. For further assurance, however, the Station intends to install a sample or "test" hood in an appropriate location, which can be periodically subjected to moderate force to verify adequate adhesiveness of the tape. The engineering evaluation addressing potential loss of adhesiveness will also be documented prior to installation.

CECo's Human Factors Group has reviewed the effect of the hood approach on the meter glare and found it to be an acceptable solution during both normal and emergency lighting conditions. This was concluded after hoods were held in place under each scenario and no interferences with meter readability occurred.

Although the hoods will resolve the DCRDR glare issue and formally close the HED, it is Dresden Station's desire to eliminate the hoods in the long term. Dresden is continuing to investigate the application of a light-absorbing optical type of coating on the meter lenses to reduce glare. In addition, although no firm plans exist, digital instrumentation may be used to replace the existing meters as a future upgrade which would also eliminate the need for hoods or other glare reduction measures.

May 11, 1990

SUMMARY

In conclusion, Dresden Station encountered problems associated with the installation of hoods to reduce meter glare for resolution of the subject HED. These problems postponed the scheduled hood installation in April, 1990. Recently however, Dresden has found an acceptable installation procedure that will allow for them to be in place by May 31, 1990. It is important to note that the HED is classified as 2C and as such is not associated with engineered safeguard systems or engineered safety features. Therefore any human error resulting from this additional one month delay in implementation will not lead to a degraded plant safety system.

Please contact this office should further information be required.

Very truly yours,



J.A. Silady
Nuclear Licensing Administrator

/scl:

cc: A. Bert Davis - Regional Administrator, RIII
P.L. Eng - Project Manager, NRR
J.P. Bongarra - Human Factors Branch, NRR
S.G. DuPont - Senior Resident Inspector, Dresden

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