



Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

October 26, 1990

Dr. Thomas E. Murley, Director
U.S. Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20852

Attn: Document Control Desk

Subject: Quad Cities Nuclear Power Station Unit 1 and 2
Review of Fire Protection Requirements
NRC Docket Nos. 50-254 and 50/265

References: (a) Letter from T.A. Ippolito to Cordell Reed
dated July 27, 1979.

(b) Letter from D.L. Farrar to H.R. Denton
dated December 2, 1985.

Dr. Murley:

The NRC transmitted the Safety Evaluation for Appendix A to Branch Technical Position (BTP) 9.5-1 for Quad Cities Station in reference (a). Commonwealth Edison had identified discrepancies with respect to the NRC Safety Evaluation Report and provided the discrepancies in reference (b). To date, Commonwealth Edison has not received approval of our proposed resolution. This item was discussed with the Quad Cities Project Manager. The Project Manager requested that the approval request be resubmitted for those items which are still outstanding.

The attachment contains a listing of modifications which were discussed in the NRC's Safety Evaluation for Quad Cities; however, these modifications are no longer appropriate based on a review of the original intent of the requirements and on current safe shutdown analyses. Commonwealth Edison would appreciate a timely review of these items so that the compensatory measures can be removed.

Finally, Reference (b) contained information related to Dresden and Quad Cities Station. The outstanding issues at Dresden Station are currently being reviewed. When completed, Commonwealth Edison will submit a similar request for Dresden Station.

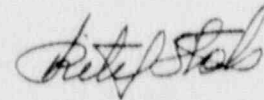
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October 26, 1990

If there are any questions regarding this topic, please contact me at
(708) 515-7283.

Very truly yours,



Rita Stols
Nuclear Licensing Administrator

cc: A.B. Davis, Regional Administrator-RIII
L.N. Olshan, Project Manager-NRR
T. Taylor, Sr. Resident Inspector-Quad Cities

RS:lmw
ZNLD284

ATTACHMENT

QUAD CITIES DISCREPANCIES
REQUEST RELIEF FROM COMMITMENT

ITEM	SER REFERENCE	DESCRIPTION/RESOLUTION
1.1	3.1.1(5)	<p>SER Section 3.1.1 states, "Early warning fire detection will be provided in the following areas: ... (5) Reactor Building Refueling Floor...". Fire detection was not installed on Refuel floor. Request relief from commitment. Effective fire detection is not practical. There is no safe shutdown equipment and minimal fire loads in this area.</p> <p>Note: Relief from this requirement was granted by the NRC in the Appendix R SER dated 7/21/88. Interim actions have been discontinued.</p>
1.2	3.1.9	<p>SER Section 3.1.9 states, "Where cable trays of different divisions are closer than 3 feet horizontally or 5 feet vertically from each other" the cables will be protected with a flame retardent barrier. Five areas at Quad Cities Station exist which do not meet the above separation criteria. It is important to note that at the time of the Quad Cities FP SER, 10 CFR 50, Appendix R was being issued which outlined new separation criteria.</p> <p>In July 1978, CECO submitted a Safe Shutdown Analysis showing that Quad Cities could be safely shutdown using the RCIC system for reactor water makeup. In supplements dated September 1979 and January 1980, further information was provided to show that both hot and cold shutdown could be achieved. However, these analysis did not fully comply with the staff requirements in 10 CFR 50, Appendix R and NRR Staff Position (Generic Letter 81-12) on safe shutdown. These subsequent NRC requirements were addressed in the 1982 Associated Circuits report. Further clarifications (Generic Letter 83-33) of these requirements were addressed in the Quad Cities Station Exemption Requests submittal dated December 19, 1984. The coating of redundant safety related cables was not required to achieve separation to ensure safe shutdown in the event of a fire by any of these analyses. Based on Quad Cities compliance with the new separation criteria outlined in 10 CFR 50, Appendix R, relief from this commitment is requested.</p> <p>Interim Action: Temporary protective barriers have been installed where required.</p>

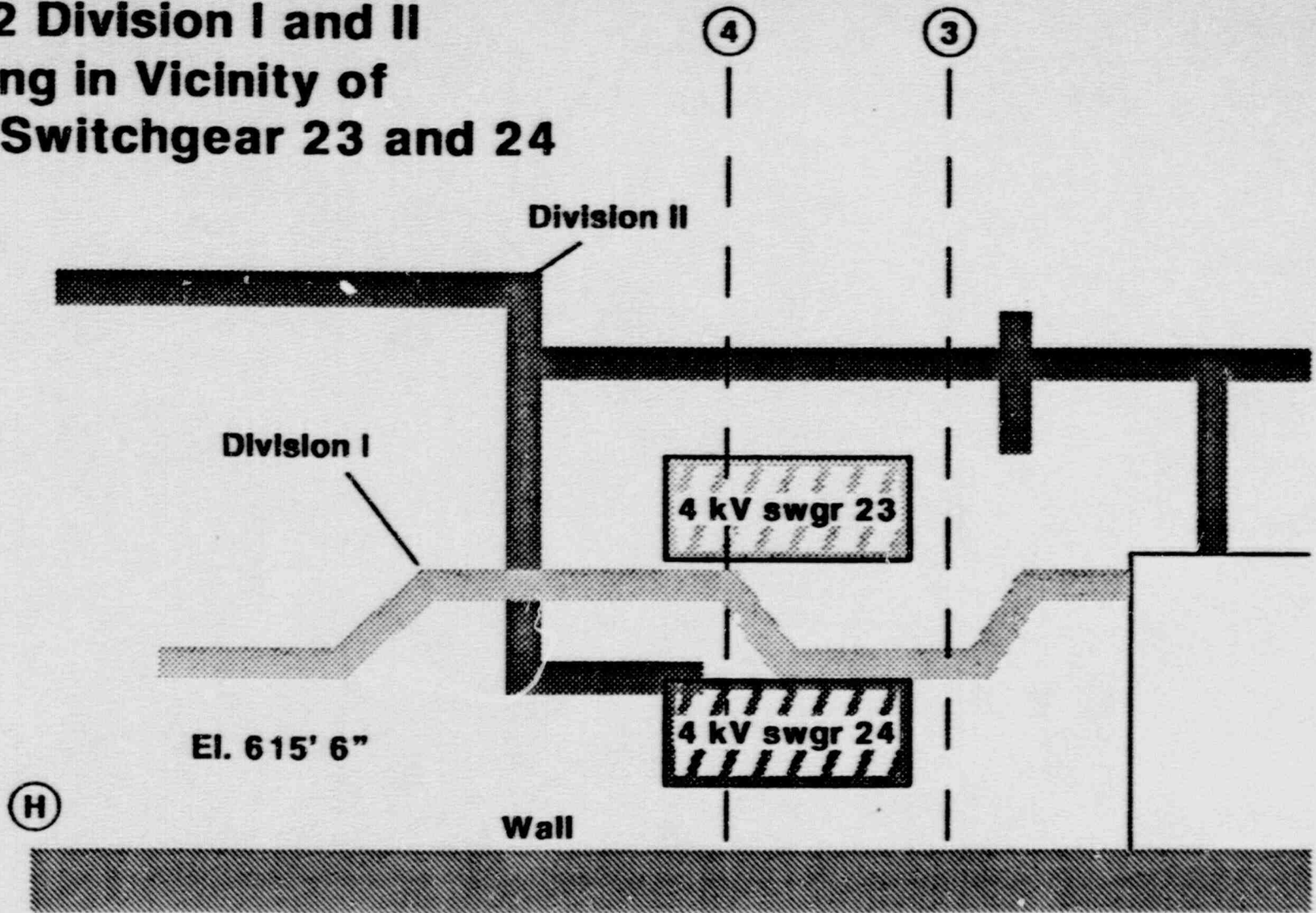
ATTACHMENT

(Cont'd)

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ITEM	SER REFERENCE	DESCRIPTION/RESOLUTION
1.3	3.1.4	<p data-bbox="410 343 1927 459">SER Section 3.1.10 states, "The top of electrical cabinets, switchgear, and motor control centers will be protected to reduce the potential for water damage from hose streams used to combat cable fires as noted...for the following areas: (1) Auxiliary Electric Equipment Room, (2) Reactor Building Mezzanine Floor, (3) Reactor Building Ground Floor, (4) Turbine Building Mezzanine Floor, and (5) Turbine Building Main Floor.</p> <p data-bbox="410 505 1927 723">Water protection was provided as noted for all areas except the Turbine Building Mezzanine Floor. For the Turbine Building Main Floor six foot vertical water shields were installed at the motor generator (MG) sets to protect the 4kV switchgear from a discharge of the foam system protecting the MG sets. This vertical shield was installed in place of the overhead canopies mentioned in the FPSER. For the Turbine Building Mezzanine Floor, the FPSER indicated that protection from water should be provided for 4kV buses 13, 14, 23 and 24. This would reduce the potential for adversely affecting a Division II bus when extinguishing a fire in overhead or nearby Division I cable tray or adversely affecting a Division I bus when fighting a nearby Division II cable tray fire.</p> <p data-bbox="410 764 1906 1045">The only safe shutdown equipment fed by buses 13, 14, 23, and 24 are the residual heat removal service water (RHRSW) pumps. However, a mechanical cross-tie with the other units Division I RHRSW piping allow the other unit to provide Division I RHRSW in the event that both 4KV buses 13 and 14 or 23 and 24 are affected by fire/water. In order to utilize this Division I mechanical crosstie, both units 4KV buses 13-1 and 23-1 must be powered. A modification was installed in late 1984 to permit this to be done without a hot shutdown repair. This repair would be required to be performed within 3 hours. Consequently, loss of these buses do not prevent safe hot or cold shutdown. The top of these buses have ventilation openings. However, installation of a canopy is impractical due to the congested (e.g. HVAC and conduit) areas above. Request relief from commitment based on existence of both Division I and Division II (recently installed) RHRSW mechanical cross-ties which meet the commitment intent. See Figures 1 and 2.</p> <p data-bbox="410 1087 1300 1110">Interim Action: A temporary cover has been provided for these buses.</p>

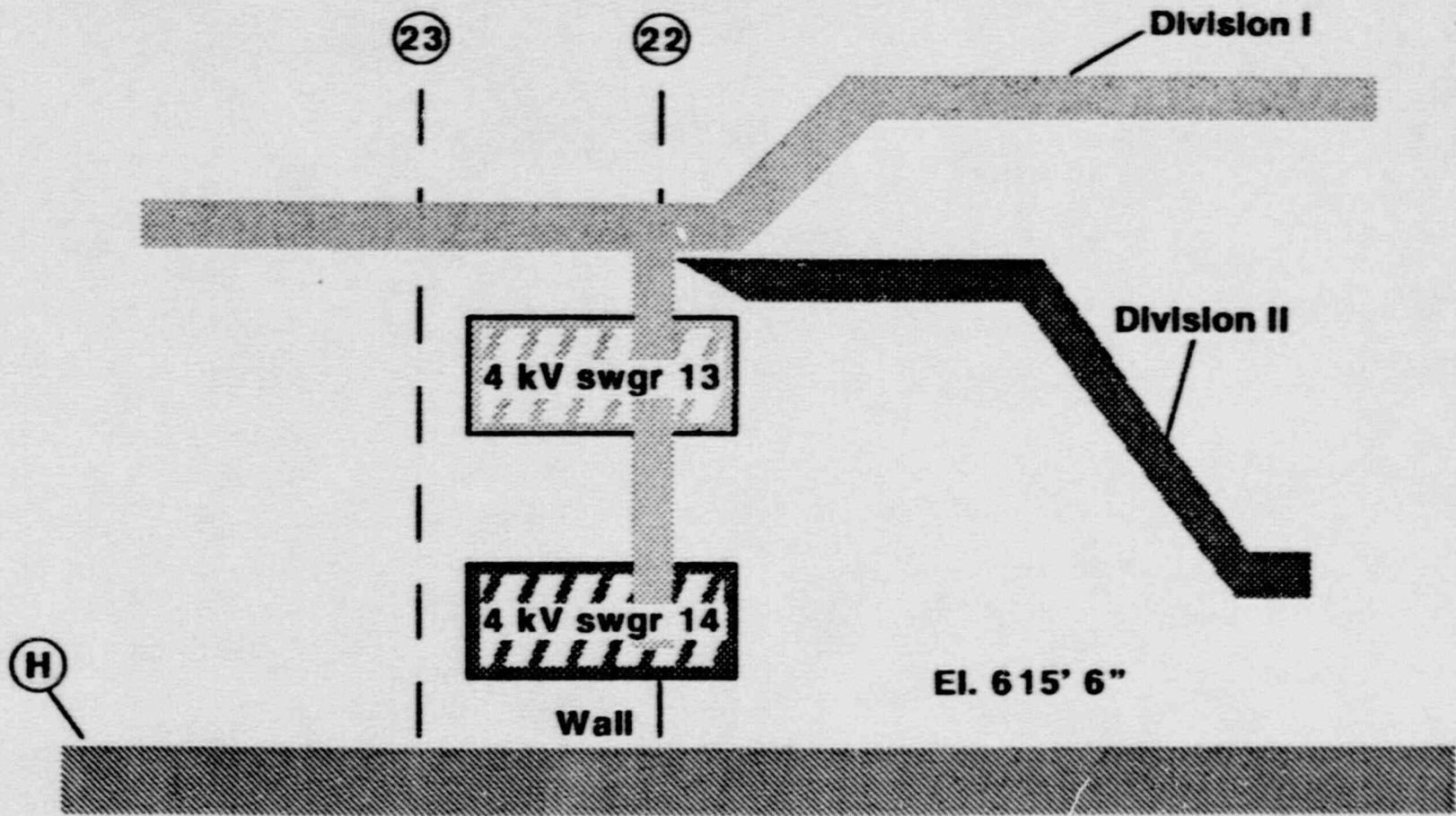
Unit 2 Division I and II Cabling in Vicinity of 4 kV Switchgear 23 and 24



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FIGURE 1

Unit 1 Division I and II Cabling in Vicinity of 4 kV Switchgear 13 and 14



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FIGURE 2