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September 23, 1982

Mr. Darrell G. Eisenhut, Director
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Dresden Station Units 2 and 3
Quad Cities Station Units 1 and 2
Supplemental Information Concerning
10 CFR 50 Appendix R, Exemption
Requests
NRC Docket Nos. 50-237/249 and
50-254/265

References (a): T. J. Rausch letter to D. G.
Eisenhut dated July 1, 1982
(Dresden).

(b): T. J. Rausch letter to D. G.
Eisenhut dated July 1, 1982
(Quad Cities).

Dear Mr. Eisenhut:

In References (a) and (b), Commonwealth Edison requested exemptions from Appendix R to 10 CFR 50 for Dresden Units 2 and 3 and Quad Cities Units 1 and 2, respectively. Enclosed, as discussed in a September 17, 1982 conference call with Mr. R. Ferguson and others of your staff, is information supplementing the referenced exemption requests. We wish to emphasize that all of the exemptions (excepting one Quad Cities exemption request from III.G.2.a of Appendix R) were related to the requirements of section III.G.3.b of Appendix R. This requirement states that alternative or dedicated shutdown capability shall be provided where redundant trains of systems required for hot shutdown located in the same fire area may be subject to damage from fire suppression activities or from the rupture or inadvertent operation of fire suppression systems. "In addition, fire detection and a fixed fire suppression system shall be installed in the area, room, or zone under consideration."

Our exemption requests from the requirements of section III.G.3.b relate only to the above quoted sentence. We are not requesting an exemption from the alternate shutdown capability requirement. In fact, our submittals demonstrate that we will have the capability to safely shutdown in the event that there is a fire in any zone postulated. The control room panels, switchgear, and motor control centers listed in the exemption requests are critical

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to the power distribution necessary for normal and emergency operation of safety-related equipment. As discussed in more detail in References (a) and (b), installation of fixed water suppression or other type suppression system is clearly not desirable from a safety standpoint. The enclosed information provides, for each piece of equipment, its fire zone location and the section of the NRC Safety Evaluation Report which previously addressed that fire zone. This SER approved the fire protection features installed (or to be installed) in each zone so that there is no question as to the adequacy of existing fire protection features at Dresden Units 2 and 3 and Quad Cities Units 1 and 2. Please note that all modifications required by the NRC SERs for Dresden Units 2 and 3 and Quad Cities Units 1 and 2 have been installed.

If you have any further questions concerning this matter, please direct them to this office.

One (1) signed original and fifty-nine (59) copies of this transmittal are provided for your use.

Very truly yours,



Thomas J. Rausch
Nuclear Licensing Administrator

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cc: Region III Inspector - Dresden
Region III Inspector - Quad Cities
R. Bevan - NRC (express copy)

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Dresden 2 & 3

1. Control Room Panels - Fire Zone 2.0
Fire loadings and equipment found in this fire zone are discussed in Section 2.3.2 of the Dresden 2&3 Fire Protection Report (Reference 1). This zone is shown on Fire Protection Figure 2/3.2-2-1. Fire protection modifications approved by the NRC have been installed in this zone and are discussed in Section 5.3 of the Dresden 2&3 Fire Protection Safety Evaluation Report (Reference 2). Alternate shutdown capability independent of a fire in this zone and all equipment located in this zone is demonstrated in Section 5.15 of the Dresden 2 & 3 Fire Protection Associated Circuits Analysis and Modifications Report (Reference 3).
2. 4kV SWGR's 23 and 24 - Fire Zone 8.2.6A.
Fire loadings and equipment found in this fire zone are discussed in Section 2.3.8.2.6 of Reference 1. This zone is shown on Fire Protection Figure 2/3.2-2-1. Fire protection modifications approved by the NRC have been installed in this zone and are discussed in Section 5.9.5 of Reference 2. Alternate shutdown capability independent of a fire in this zone and all equipment located in this zone is demonstrated in Section 5.27 of Reference 3.
3. 4kV SWGR's 23-1 and 24-1 - Fire Zone 1.1.2.3
Fire loadings and equipment found in this discussed in Section 2.3.1.1.2.3 of Reference 1. This zone is shown on Fire Protection Figure 2/3.2-1-3. Fire Protection modifications approved by the NRC have been installed in this zone and are discussed in Section 5.1.3 of Reference 2. Alternate shutdown capability independent of a fire in this zone and all equipment located in this zone is demonstrated in Section 5.3 of Reference 3.
4. 480 V SWGR's 28 and 29 - Fire Zone 1.1.2.4.
250 V MCC's 2A & 2B
Fire loadings and equipment found in this fire zone are discussed in Section 2.3.1.1.2.4 of Reference 1. This zone is shown on Fire Protection Figure 2/3.2-1-4. Fire protection modifications approved by the NRC have been installed in this zone and are discussed in Section 5.1.4 of Reference 2. Alternate shutdown capability independent of a fire in this zone and all equipment located in this zone is demonstrated in Section 5.4 of Reference 3.
5. 480 V MCC's 28-7 and 29-7 - Fire Zone 1.1.2.2.
Fire loadings and equipment in this fire zone are discussed in Section 2.3.1.1.2.2 of Reference 1. This zone is shown on Fire Protection Figure 2/3.2-1-2. Fire Protection modifications approved by the NRC have been installed in this zone and are discussed in Section 5.1.2 of Reference 2. Alternate shutdown capability independent of a fire in this zone and all equipment located in this zone is demonstrated in Section 5.2 of Reference 3.

Dresden 2 & 3

6. 125 VDC Distribution Panels 2A and 2B - Fire Zone 7.0
Fire loadings and equipment found in this fire zone are discussed in Section 2.3.7 of Reference 1. This zone is shown on Fire Protection Figure 2/3.2-2-1. Fire Protection modifications approved by the NRC have been installed in this zone and are discussed in Section 5.6 of Reference 2. Alternate shutdown capability independent of a fire in this zone and all equipment located in this zone is demonstrated in Section 5.18 of Reference 3.
7. 4kV SWGR's 33 and 34 - Fire Zone 8.2.6B.
Fire loadings and equipment found in this fire zone are discussed in Section 2.3.8.2.6 of Reference 1. This zone is shown on Fire Protection Figure 3.2-8-4. Fire protection modifications approved by the NRC have been installed in this zone and are discussed in Section 5.9.5 of Reference 2. Alternate shutdown capability independent of a fire in this zone and all equipment located in this zone is demonstrated in Section 5.28 of Reference 3.
8. 4kV SWGR's 33-1 and 34-1 - Fire Zone 1.1.1.3
Fire loadings and equipment found in this fire zone are discussed in Section 2.3.1.1.1.3 of Reference 1. This zone is shown on Fire Protection Figure 2/3.2-1-3. Fire protection modifications approved by the NRC have been installed in this zone and are discussed in Section 5.1.3 of Reference 2. Alternate shutdown capability independent of a fire in this zone and all equipment located in this zone is demonstrated in Section 5.10 of Reference 3.
9. 480 V SWGR's 38 and 39 - Fire Zone 1.1.1.4
250 V MCC's 3A & 3B
Fire loadings and equipment found in this fire zone are discussed in Section 2.3.1.1.1.4 of Reference 1. This zone is shown on Fire Protection Figure 2/3.2-1-4. Fire protection modifications approved by the NRC have been installed in this zone and are discussed in Section 5.1.4 of Reference 2. Alternate shutdown capability independent of a fire in this zone and all equipment located in this zone is demonstrated in Section 5.11 of Reference 3.
10. 480 V MCC's 38-7 and 39-7 - Fire Zone 1.1.1.2
Fire loadings and equipment found in this fire zone are discussed in Section 2.3.1.1.1.2 of Reference 1. This zone is shown on Fire Protection Figure 2/3.2-1-2. Fire protection modifications approved by the NRC have been installed in this zone and are discussed in Section 5.1.2 of Reference 2. Alternate shutdown capability independent of a fire in this zone and all equipment located in this zone is demonstrated in Section 5.9 of Reference 3.
11. 125 V DC Distribution Panels 3A and 3B - Fire Zone 7.0
Fire loadings and equipment found in this fire zone are discussed in Section 2.3.7 of Reference 1. This zone is shown on Fire Protection Figure 3.2-8-4. Fire Protection modifications approved by the NRC have been installed in this zone and are discussed in Section 5.7 of Reference 2. Alternate shutdown capability independent of a fire in this zone and all equipment located in this zone is demonstrated in Section 5.19 of Reference 3.

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References

1. Information Relevant to Fire Protection Systems and Programs, Part 3, Dresden Nuclear Power Station, Units 2 and 3, April, 1977. R. L. Bolger letter to V. Stello dated March 29, 1977.
2. Dresden Nuclear Power Station, Units 2 and 3 Safety Evaluation Report (Fire Protection), March, 1978. G. Lear letter to Cordell Reed dated March 22, 1978.
3. Dresden Station 2 & 3 Fire Protection Associated Circuits Analysis and Modifications Report, June, 1982. T. J. Rausch letter to D. G. Eisenhut dated July 1, 1982.

Quad Cities 1 & 2

1. Control Panels - Fire Zone 2.0
Fire loadings and all equipment found in this fire zone are discussed in Section 2.3.2 of Reference 1. This zone is shown on Fire Protection Figure 1/2.2-2-1. Fire protection modifications approved by the NRC have been installed in this zone and are discussed in Section 5.1 of Reference 2. Alternate shutdown capability independent of a fire in this zone and all equipment located in this zone is demonstrated in Section 5.13 of Reference 3.
2. 4kV SWGR's 13 and 14 - Fire Zone 8.2.7.
Fire loadings and equipment found in this fire zone are discussed in Section 2.3.8.2.7 of Reference 1.
 1. This zone is shown on Fire Protection Figure 1.2-8-5.
Fire protection modifications approved by the NRC have been installed in this zone and are discussed in Section 5.18 of Reference 2. Alternate shutdown capability independent of a fire in this zone and all equipment located in this zone is demonstrated in Section 5.29 of Reference 3.
3. 480 V SWGR's 18 and 19 - Fire Zone 8.2.9.
Fire loadings and equipment found in this fire zone are discussed in Section 2.3.8.2.9 of Reference 1. This zone is shown on Fire Protection Figure 1/2.2-1-4. Fire protection modifications approved by the NRC have been installed in this zone and are discussed in Section 5.19 of Reference 2. Alternate shutdown capability independent of a fire in this zone and all equipment located in this zone is demonstrated in Section 5.33 of Reference 3.
4. 480 V MCC's 18-1A, 18-1B, 19-1, - Fire Zone 1.1.1.3
19-6, and 19-4, 19-1-1, 18/19-5;
250 V MCC's 1A and 1B.
Fire loadings and equipment found in this fire zone are discussed in Section 2.3.1.1.1.3 of Reference 1. This zone is shown on Fire Protection Figure 1/2.2-1-3. Fire protection modifications approved by the NRC have been installed in this zone and are discussed in Section 5.8 of Reference 2. Alternate shutdown capability independent of a fire in this zone and all equipment located in the fire zone is demonstrated in Section 5.3 of Reference 3.
5. 4kV SWGR's 23 and 24 - Fire Zone 8.2.7
Fire loadings and all equipment found in this fire zone are discussed in Section 2.3.8.2.7 of Reference 1. This zone is shown on Fire Protection Figure 2.2-8-5. Fire protection modifications approved by the NRC has been installed in this zone and are discussed in Section 5.18 of Reference 2. Alternate shutdown capability independent of a fire in this zone and all equipment located in this fire zone is demonstrated in Section 5.30 of Reference 3.

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6. 480 V SWGR's 28 and 29 - Fire Zone 8.2.9
Fire loadings and all equipment found in this fire zone are discussed in Section 2.3.8.2.9 of Reference 1. This zone is shown on Fire Protection Figure 1/2.2-1-4. Fire protection modifications approved by the NRC have been installed in this zone and are discussed in Section 5.19 of Reference 2. Alternate shutdown capability independent of a fire in this zone and all equipment located in this fire zone is demonstrated in Section 5.34 of Reference 3.
7. 480 V MCC's 28-1A, 28-1B, 29-1-1, - Fire Zone 1.1.2.3
29-4, 29-6 and 28/29-5; 250 V MCC's
2A and 2B
Fire loadings and all equipment found in this fire zone are discussed in Section 2.3.1.1.2.3 of Reference 1. This zone is shown on Fire Protection Figure 1/2.2-1-3. Fire protection modifications approved by the NRC have been installed in this zone and are discussed in Section 5.8 of Reference 2. Alternate shutdown capability independent of a fire in this zone and all equipment located in this fire zone is demonstrated in Section 5.9 of Reference 3.
8. Reactor Building Basement - Fire Zone 1.1.1.1
Fire loadings and all equipment found in this fire zone are discussed in Section 2.3.1.1.1.1 of Reference 1. This zone is shown on Fire Protection Figure 1/2.2-1-1-. This zone was not discussed in Reference 2 due to the lack of fire load. Safe shutdown capability for a fire in this zone is demonstrated in Section 5.1 of Reference 3 pending approval of the applied exemption request from Section III.G.2 of Appendix 'R'. As explained in Section 5.7, a one hour barrier between cable trays of redundant divisions is justified because of the negligible fire loadings.
9. Reactor Building Basement - Fire Zone 1.1.2.1
Fire loadings and all equipment found in this fire zone are discussed in Section 2.3.1.1.2.1 of Reference 1. This zone is shown on Fire Protection Figure 1/2.2-1-1. As explained in Section 5.7, a one hour barrier between cable trays of redundant divisions is justified because of the negligible fire loadings.

This zone was not discussed in Reference 2 due to the lack of fire load. Safe shutdown capability for a fire in this zone is demonstrated in Section 5.7 of Reference 2 pending approval of the applied exemption request from Section III.G.2 of Appendix 'R'.

Quad Cities 1 & 2

References

1. Information Relevant to Fire Protection Systems and Programs, Part 3, Quad Cities Station, Units 1 and 2, April, 1977. R. L. Bolger letter to V. Stello dated March 29, 1977.
2. Fire Protection Safety Evaluation Report, Quad Cities Nuclear Power Station Units 1 & 2, July 27, 1979 letter from T. A. Ippolito to Cordell Reed.
3. Quad Cities Station 1 & 2 Fire Protection Associated Circuits Analysis and Modifications Report, June, 1982. T. J. Rausch letter to D. G. Eisenhut dated July 1, 1982.

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