

April 20, 1988

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Docket Nos. 50-254  
and 50-265

Mr. Henry Bliss  
Nuclear Licensing Manager  
Commonwealth Edison Company  
Post Office Box 767  
Chicago, Illinois 60690

Dear Mr. Bliss:

SUBJECT: REVISED SAFETY EVALUATION FOR EXEMPTION FROM 10 CFR 50,  
APPENDIX R, SECTION III.G.1  
(TAC NOS. 57284, 57285, 64493, AND 64494)

By letter dated December 1, 1987, the NRC staff issued a Safety Evaluation Report (SER) to address exemption requests from the regulatory requirements of 10 CFR 50, Appendix R, Section III.G submitted by Commonwealth Edison Company (CECo, the licensee) for the Quad Cities Nuclear Power Station (QCNP). Subsequently, CECo reviewed our SER for consistency with the as-built configuration of QCNP and provided us with their documented comments, as well as applicable justifications, on February 19, 1988. The NRC staff evaluated these comments and incorporated those that were germane. Consequently, in response to CECo comments offered on February 19, 1988, we revised our previous SER on Appendix R, Section III.G. The revised SER is enclosed herein, and shall replace the previous SER of December 1, 1987 in its entirety. However, the cover letter for this previous SER is still appropriate.

Sincerely,

151

Thierry Ross, Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects

Enclosure:  
As stated

cc: See next page

OFC	: PDIII-2	: PDIII-2	: SPLB	: PDIII-2	:	:	:
NAME	: TRoss/ww	: LLuther	: JCraig *	: DMuller	:	:	:
DATE	: 4/19/88	: 4/18/88	: 4/18/88	: 4/20/88	:	:	:

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\* See SER concurrence cover letter  
on previous white page

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technically justified. Furthermore, in the letter dated November 20, 1987 CECO notified the staff that a portion of an exemption request, 10.0 "Hot Shutdown Repairs (Fuse Replacements)" in the September 30, 1987 letter, was no longer necessary due to a non-Appendix R plant modification to be accomplished during the Unit 1 refueling outage. Consequently, that part of the exemption request applicable to the Unit 1 Reactor Core Isolation Cooling System inboard steam supply isolation valve was withdrawn.

Enclosure 1 of this letter contains the NRC staff SE, which encompasses all the aforementioned CECO submittals except for two subject requests described below. It was the staff's conclusion that the manual actions, including hot shutdown repairs, proposed by CECO to resolve concerns of high impedance faults, electrical isolation deficiencies, and spurious operations were acceptable; and applicable exemptions requests (for performing hot shutdown repairs) should be granted. The staff also concluded that deviations described by the July 17, 1987 letter would not compromise the safe shutdown capability at QCNPS and therefore, are acceptable. Furthermore, the staff recognizes that ICMs specified in Enclosure 2 of the reevaluation report dated December 18, 1984 are no longer required. It should also be noted, CECO submitted two additional letters, not previously mentioned, dated July 23, 1987 and December 2, 1987. These letters were provided to the staff for information purposes only, as such no formal evaluation was performed.

Technical exemption requests from Section III.G of Appendix R, contained in Enclosure 3 of the December 18, 1984 reevaluation report, related to fire protection features for selected plant areas will be evaluated by the staff in a separate SE to be issued later. A scheduler exemption from compliance with 10 CFR 50.48 was requested by letter dated November 20, 1987. This subject will also be evaluated separately and issued later. The legal regulatory "Exemption", that exempts certain hot shutdown repairs at QCNPS from compliance with requirements of 10 CFR 50, Appendix R, Section III.G.1 will be issued to CECO and published in the Federal Register by other separate correspondence, which should be forthcoming.

In response to CECO comments dated February 19, 1988, the NRC staff has revised the Appendix R Safety Evaluation enclosed a in letter dated December 1, 1987. Consequently, the SE enclosed herein shall be considered to supersede the December 1, 1987 SE in its entirety.

151  
Thierry M. Ross, Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects

Enclosures:  
1. Safety Evaluation

cc w/enclosures:  
See next page

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Dockets Nos. 50-254  
and 50-265

Mr. L.D. Butterfield, Jr.  
Nuclear Licensing Manager  
Commonwealth Edison Company  
Post Office Box 767  
Chicago, Illinois 60690

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Dear Mr. Butterfield:

SUBJECT: INTERIM COMPENSATORY MEASURES AND REQUEST FOR EXEMPTION  
FROM 10 CFR PART 50, APPENDIX R, SECTION III.G.1  
REGARDING HOT SHUTDOWN REPAIRS  
(TAC NOS. 57284, 57285, 64493 AND 64494)

By letter dated December 18, 1984, Commonwealth Edison Company (CECo, the licensee) submitted a reevaluation report pertaining to 10 CFR Part 50, Appendix R (Fire Protection Program) for Quad Cities Nuclear Power Station (QCNPS) in response to NRC staff positions prescribed in Generic Letter 83-33, dated October 19, 1983. This report identified Interim Compensatory Measures (ICMs) that were being conducted at QCNPS for an interim period (until completion of Appendix R required hardware modifications) to ensure safe shutdown capability of Units 1 or 2 for postulated fire events. Based on a review of the aforementioned report, the NRC staff has determined that the previous staff Safety Evaluation (SE) and approval of safe and alternative shutdown capabilities at QCNPS, issued December 30, 1982, remains valid. However, during the staff's review, additional information was requested from CECo concerning the affect of fire-induced high impedance faults and electrical isolation deficiencies upon safe shutdown capability at QCNPS for certain fire events. These issues were not explicitly addressed in the reevaluation report. Additional information was also sought on the ICMs.

CECo responded to the staff's inquiries with letters dated December 30, 1986, March 13, 1987, July 15, 1987, and October 9, 1987. In these submittals, CECo proposed conducting certain manual operations, including hot shutdown repairs (i.e., pulling out fuses and/or replacing blown fuses), to resolve the issues above, and resolve problems with fire-induced spurious operations that were subsequently self-identified. In general, Section III.G.1 requirements have been interpreted to prohibit hot shutdown repairs. Consequently, CECo submitted letters dated January 12, 1987, September 30, 1987, October 1, 1987, November 20, 1987, and November 30, 1987, requesting approval for several exemptions from Appendix R, Section III.G.1 which would allow such repairs in order to achieve and maintain hot shutdown.

In the March 13, 1987 letter, CECo stated that because all the required safe shutdown hardware modifications had been completed, their corresponding ICMs would no longer be necessary. Also, in a July 17, 1987 letter, several deviations between the present safe shutdown program, and what was approved in the previous NRC SE (dated December 30, 1982), were described by CECo and