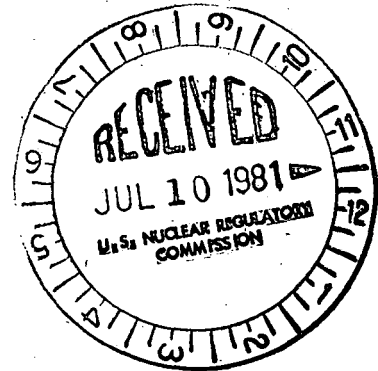


July 3, 1981

Docket No. 50-237
LS05-81-07-004



Mr. J. S. Abel
Director of Nuclear Licensing
Commonwealth Edison Company
Post Office Box 767
Chicago, Illinois 60690

Dear Mr. Abel:

SUBJECT: SEP TOPIC VI-10.A, TESTING OF REACTOR TRIP SYSTEM
AND ENGINEERED SAFETY FEATURES, INCLUDING RESPONSE
TIME, SAFETY EVALUATION REPORT (DRESDEN 2 NUCLEAR
POWER PLANT)

The enclosed staff safety evaluation is based on a contractor document that has been made available to you previously. This evaluation supports the findings of the staff safety evaluation of Topic VI-10.A and proposes modifications to the Technical Specifications and some equipment to implement a response time testing program.

The need to actually implement these changes will be determined during the integrated safety assessment. This topic assessment may be revised in the future if your facility design is changed or if NRC criteria relating to this topic are modified before the integrated assessment is completed.

Sincerely,

Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing

Enclosure:
As stated

cc w/enclosure:
See next page

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OFFICE	SEPB:DL	SL/SEPB:DL	C/SEPB:DL	ORB#5:DL	C/ORB#5:DL	AD/SA:DL
SURNAME	RS [initials]:dn	RHermann	WRussell	PO'Connor	DCrutchfield	GLainas
DATE	6/2/81	6/2/81	6/2/81	7/2/81	7/2/81	7/2/81

Mr. J. S. Abel

DRESDEN 2
Docket No. 50-237

cc
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Federal Activities Branch
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TOPIC: VI-10.A, TESTING OF REACTOR TRIP SYSTEM AND ENGINEERED SAFETY FEATURES, INCLUDING RESPONSE TIME TESTING

I. INTRODUCTION

The purpose of this Topic is to review the reactor trip system (RTS) and engineered safety features (ESF) test program for verification of RTS and ESF operability on a periodic basis and to verify RTS and ESF response time in order to assure the operability of the RTS and ESF. Response times should not exceed those assumed in the plant accident analyses. Accordingly, the test program of the RTS and ESF was reviewed in accordance with the Standard Review Plan, including applicable Branch Technical Positions.

II. REVIEW CRITERIA

The review criteria are presented in Section 2 of Lawrence Livermore Laboratory Report UCID 1889, Vol. II, "Systematic Evaluation Program Review of NRC Safety Topic VI-10.A Associated with the Electrical, Instrumentation and Control Portions of the Testing of Reactor Trip System and Engineered Safety Features, Including Response Time for the Dresden Station, Unit 2 Nuclear Power Plant."

III. RELATED SAFETY TOPICS AND INTERFACES

Topic VI-7.A.3 discusses the question of testing protection systems under conditions as close to design condition as practical. There are no topics that are dependent on the present topic information for their completion.

IV. REVIEW GUIDELINES

Review guidelines are presented in Section 3 of Report UCID 18698, Vol. II.

V. EVALUATION

Dresden 2 complies with the current licensing criteria, except for IEEE Std 338-1975, Section 6.3.4 (response time testing).

VI. CONCLUSION

It is the staff's position that the design of systems which are required for safety shall include provisions for periodic verification that the minimum performance of instruments and control is not less than that which was assumed in the safety analyses. The bases for this position are General Design Criterion 21, Section 3.9 of IEEE Std, 279-1971, and IEEE Std. 338-1971. Therefore, the licensee should implement a program for response time testing of all reactor protection systems (including engineered safety features systems such as containment isolation). As a part of this program, the response time test requirements should be stated in the Technical Specifications in a manner similar to that of the Standard Technical Specifications.