



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

TERA

July 7, 1980

Docket No. 50-213

Mr. W. G. Council, Vice President
Nuclear Engineering and Operations
Connecticut Yankee Atomic Power Company
Post Office Box 270
Hartford, Connecticut 06101

Dear Mr. Council:

You are requested to provide the information specified in the enclosure to this letter regarding the testing of the reactor trip system and engineered safety features for the Haddam Neck Plant. Receipt of your response is requested not later than December 1, 1980.

Sincerely,

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

Enclosure:
Request for Additional
Information

cc w/enclosure:
See next page

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Mr. W. G. Council

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cc w/enclosure:
Day, Berry & Howard
Counselors at Law
One Constitution Plaza
Hartford, Connecticut 06103

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Haddam Neck Plant
RFD #1
Post Office Box 127E
East Hampton, Connecticut 06424

Mr. James R. Himmelwright
Northeast Utilities Service Company
P. O. Box 270
Hartford, Connecticut 06101

Russell Library
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Middletown, Connecticut 06457

Board of Selectmen
Town Hall
Haddam, Connecticut 06103

Connecticut Energy Agency
ATTN: Assistant Director
Research and Policy
Development
Department of Planning and
Energy Policy
20 Grand Street
Hartford, Connecticut 06106

Director, Technical Assessment
Division
Office of Radiation Programs
(AW-459)
U. S. Environmental Protection
Agency
Crystal Mall #2
Arlington, Virginia 20460

U. S. Environmental Protection
Agency
Region I Office
ATTN: EIS COORDINATOR
JFK Federal Building
Boston, Massachusetts 02203

REQUEST FOR INFORMATION
ON SEP TOPIC VI-10.A
"TESTING OF REACTOR TRIP SYSTEM
AND ENGINEERED SAFETY FEATURES
INCLUDING RESPONSE TIME TESTING"

As part of our review of this topic we need to determine the extent to which you may be employing jumpers and jury rigs to perform periodic tests of Class IE electrical systems (or the equivalent of such systems in your plant). Such practices would be contrary to current licensing criteria. Specifically, the use of jury-rigged bypasses such as temporary jumpers, the removal of fuses, or removal of connections are not permitted by Regulatory Guide 1.118. The basis for this provision is that such practices are not conducive to satisfying the requirements of IEEE Std. 279-1971 Section 4.11 and usually are a violation of Section 4.13. In addition, the means which are provided for the testing of protection systems should satisfy the requirements of IEEE Std. 279-1971 Section 4.11 and 4.13.

IEEE Std. 279 Section 4.11 requires that the system be designed to permit testing, calibration and maintenance during power operation without compromise of the capability to perform the safety function in the event of a single failure. (An exemption is granted for one-out-of-two systems where it can be shown that the probability of failure in the remaining channel is acceptably small). The methods that have been found acceptable to the staff is satisfying the requirements of Section 4.13 (Indication of Bypasses) are presented in Regulatory Guide 1.47.

Because sufficient information as to the extent to which you may use such bypasses has not been found in the docket file, please describe:

- (1) The extent to which you use jury-rigged bypasses, and
- (2) The means that are used to satisfy the basis objectives of current licensing criteria so that during testing:
 - (a) The protection system meets the single failure criterion, and
 - (b) The operator has clear and accurate indication of system status (including assurance of knowing that a subsystem is in test and that, when the test is completed, the bypasses have been removed). Where administrative procedures are relied upon, please describe them in sufficient detail to allow a comparison with the intent of Regulatory Guide 1.47.