



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

NRC PDR

DEC 15 1980

Docket No. 50-245
LS05-80-12-021

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

Dear Mr. Council:

RE: MILLSTONE - SEP TOPIC IV-2, REACTIVITY CONTROL SYSTEMS DESIGN
AND PROTECTION AGAINST SINGLE FAILURES

The enclosed request for information has been prepared by the staff as a part of our review of SEP Topic IV-2.

Please provide the requested information within 90 days of receipt of this letter.

Sincerely,

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

Enclosure:
Request for Information on
SEP Topic IV-2

cc w/enclosure:
See next page

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Mr. W. G. Council

MILESTONE NUCLEAR
POWER STATION,
UNIT NO. 1
DOCKET NO. 50-245

cc

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Waterford Public Library
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ENCLOSURE
REQUEST FOR INFORMATION
SEP TOPIC IV-2

General Design Criterion 25 requires that the reactor protection system be designed to assure that specified acceptable fuel damage limits are not exceeded in the event of any single failure of the reactivity control systems, such as accidental rod withdrawals.

1. Describe the single failures within systems used for reactivity control which can:
 - a) Cause an inadvertent reactivity insertion.
 - b) Cause a single or combination of rods to be positioned in other than the design sequence. For PWRs this should include consideration of single rod withdrawal/insertions which can result from a single equipment component failure.
2. Delineate those design features which limit reactivity insertion rates and rod malpositions resulting from a single failure. Provide the appropriate circuit schematics showing these design features.
3. Provide or reference appropriate analyses to demonstrate that specified acceptable fuel damage limits are not exceeded in the event of any of the single failures identified in Item 1 above.
4. Identify the operating procedures, alarms, interlocks, or protection system actions which must be used in limiting the consequences following a single failure within systems used for reactivity control. Where equipment actions are required, indicate whether the equipment meets the criteria of IEEE-279.