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

DEC 15 1980

Docket No. 50-409  
LS05-80-12-020

Mr. Frank Linder  
General Manager  
Dairyland Power Cooperative  
2615 East Avenue South  
LaCrosse, Wisconsin 54601

Dear Mr. Linder:

RE: LACROSSE - 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. Frank Linder

LA CROSSE BOILING  
WATER REACTOR  
DOCKET NO. 50-409

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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.