

DEC 05 1986

Docket No. 50-244

Mr. Roger W. Kober, Vice President  
Electric and Steam Production  
Rochester Gas & Electric Corp.  
89 East Avenue  
Rochester, New York 14649

Dear Mr. Kober:

SUBJECT: RESOLUTION OF TMI ACTION ITEM II.K.3.31 RELATED TO THE SMALL BREAK  
LOCA ANALYSIS FOR THE R. E. GINNA NUCLEAR POWER PLANT

On June 6, 1985, we issued our Safety Evaluation (SE), for resolution of TMI Action Plan Item II.K.3.30 for the R. E. Ginna Nuclear Power Plant. We indicated that within one year of that date all licensees and applicants of Westinghouse NSSS design were required to submit plant specific analysis with NOTRUMP as required by TMI Action Plan Item II.K.3.31. Additional guidance contained in Generic Letter 83-35 stated that this analysis may be submitted generically as long as the generic submittal included validation that the limiting break location has not shifted away from the cold legs to the hot or pump suction legs.

By letter dated July 8, 1986, you indicated that resolution of II.K.3.31 for R. E. Ginna would be based upon generic NOTRUMP analysis submitted to the NRC as WCAP-11145 by the Westinghouse Owner's Group (WOG). This WCAP was sent to the NRC by letter dated June 11, 1986 by L. D. Butterfield of the WOG. The NRC staff approved use of WCAP-11145 by letter to Mr. Butterfield dated October 6, 1986.

We have reviewed the WOG submittal and have determined that the submittal adequately addresses TMI Action Plan Item II.K.3.31 for your facility including that the limiting break location has not shifted. The details of our review are contained in the enclosed SE. This completes our effort under TAC No. 48168.

Sincerely,

*/s/*

Dominic C. DiIanni, Project Manager  
Project Directorate #1  
Division of PWR Licensing-A

Enclosure:  
As Stated

cc's See Next Page

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12-1-74

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Mr. Roger W. Kober  
Rochester Gas and Electric Corporation

R. E. Ginna Nuclear Power Plant

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11-11-11

NUREG-0737 Item No. II.K.3.31 Plant-Specific Calculations to  
Show Compliance with 10 CFR 50.46  
Supplemental Safety Evaluation by the  
The Office of Nuclear Reactor Regulation for  
Ginna Nuclear Plant

Section II.K.3.30 of NUREG-0737 outlines the Commission requirements for the industry to demonstrate that its small break LOCA methods continue to comply with the requirements of Appendix K to 10 CFR Part 50. The technical issues to be addressed were listed in NUREG-0611 including comparison with semiscale experimental test results. In response to Section II.K.3.30, the Westinghouse Owners Group elected to reference the NOTRUMP code as the new licensing small break LOCA model. The NOTRUMP code and methodology are described in WCAP-10079 and WCAP-10054. The staff reviewed and approved NOTRUMP as the new licensing tool for calculating small break LOCA response for Westinghouse plant designs. The staff further concluded that the Westinghouse Owners Group had met the requirements of Section II.K.3.30.

Referencing the new computer code did not imply deficiencies in the WFLASH code (which was previously utilized for small break LOCA analysis) such that the code did not comply with Appendix K to 10 CFR Part 50. The decision to use NOTRUMP was based on desires of the industry to perform licensing evaluations with a computer program specifically designed to calculate small break LOCAs with greater phenomenological accuracy than capable by WFLASH.

Section II.K.3.31 of NUREG-0737 required that each license holder or applicant submit a new small break analysis using the model approved under II.K.3.30. NRC Generic Letter 83-35 provided clarification for the II.K.3.31 requirements by allowing license holders and applicants to comply on a generic basis by demonstrating that the WFLASH analyses are conservative when compared to analyses performed using NOTRUMP.

In response to this guidance, the Westinghouse owners submitted WCAP-11145 which contains generic comparisons to WFLASH analyses for various plant types. These include comparisons for 2-loop plants of the Ginna design. If plant specific analyses were performed for Ginna using NOTRUMP, lower peak clad temperatures should be expected in comparison with the generic NOTRUMP analysis (about 917°F lower than the 1,713°F PCT currently calculated with WFLASH SBLOCA EM).

Although the calculated peak temperatures are significantly lower for the NOTRUMP analyses than for the WFLASH analyses the 4 inch break remains the limiting break size.

Staff review of WCAP-11145 has been completed and accepted as a licensing basis for SBLOCA analysis. The applicant has referenced WCAP-11145 (which consists of the results from calculations using approved methodology) in lieu of submitting a plant specific analysis and meets the criteria as stated in

NRC Generic Letter 83-35. The staff, therefore, concludes that the Ginna FSAR analyses of small break LOCA have been demonstrated to be conservative in comparison with the NOTRUMP Evaluation Model. This meets the requirements of II.K.3.31 and 10 CFR 50.46 for Ginna.

Principal Contributor:

Larry Bell

Date: DEC 05 1986

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PShuttleworth w/Encl.  
DDianni w/Encl.

December 2, 1986

DOCKET NO(S). 50-244  
Mr. Roger W. Kober  
Vice President  
Electric and Steam Production  
Rochester Gas & Electric Corporation  
89 East Avenue  
Rochester, New York 14649  
SUBJECT: R. E. GINNA NUCLEAR POWER PLANT

The following documents concerning our review of the subject facility are transmitted for your information.

- Notice of Receipt of Application, dated \_\_\_\_\_.
- Draft/Final Environmental Statment, dated \_\_\_\_\_.
- Notice of Availability of Draft/Final Environmental Statement, dated \_\_\_\_\_.
- Safety Evaluation Report, or Supplement No. \_\_\_\_\_, dated \_\_\_\_\_.
- Notice of Hearing on Application for Construction Permit, dated \_\_\_\_\_.
- Notice of Consideration of Issuance of Facility Operating License, dated \_\_\_\_\_.
- Monthly Notice; Applications and Amendments to Operating Licenses Involving no Significant Hazards Considerations, dated \_\_\_\_\_.
- Application and Safety Analysis Report, Volume \_\_\_\_\_.
- Amendment No. \_\_\_\_\_ to Application/SAR dated \_\_\_\_\_.
- Construction Permit No. CPPR- \_\_\_\_\_, Amendment No. \_\_\_\_\_ dated \_\_\_\_\_.
- Facility Operating License No. \_\_\_\_\_, Amendment No. \_\_\_\_\_, dated \_\_\_\_\_.
- Order Extending Construction Completion Date, dated \_\_\_\_\_.
- Other (Specify) Biweekly Notice covering period November 19, 1986. Expiration date for hearing requests and comments December 19, 1986.

Division of PWR Licensing-A  
Office of Nuclear Reactor Regulation

Enclosures:  
As stated

cc: See Next Page

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Rochester Gas and Electric Corporation

R. E. Ginna Nuclear Power Plant

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