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SUBJECT: Forwards comments on NRC draft assessments of SEP Topics III-10.A,V-II.A,VI-7.C.1,VI-7.F & VIII-3.B,transmitted in NRC 800820 ltr.Final NRC assessments should not be prepared until addl opportunity to resolve util comments is provided.

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January 8, 1981

Director of Nuclear Reactor Regulation
ATTN: Mr. Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: SEP Topics III-10.A, V-11.A, VI-7.C.1, VI-7.F, VIII-3.B
R. E. Ginna Nuclear Power Plant
Docket No. 50-244

Dear Mr. Crutchfield:

Enclosed are the Rochester Gas and Electric responses to the draft assessments prepared by the NRC, and transmitted by letter dated August 20, 1980, for these SEP topics. In some cases, the Ginna design differs from that presented in the assessments. Specific differences are noted in the enclosures. In other cases, the assessments compare the Ginna design to criteria not provided in the Regulations, Regulatory Guides, or Standard Review Plan.

RG&E thus considers that final NRC assessments should not be prepared at this time. Additional opportunity to resolve RG&E comments, and discuss the unpublished regulatory criteria being used in these topic assessments, and their implementation, must be provided.

Very truly yours,

John E. Maier

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Enclosures

Enclosure 1

SEP Topic III-10.A, Thermal Overload Protection for Motors of Motor-Operated Valves

The description of the Ginna thermal overload protection system is generally correct. However, the following comments do apply:

1. The "Discussion" section of Regulatory Guide 1.106 states that the "...use of these overload devices to protect intermittent duty motors may, therefore, result in undesired actuation of the devices if the cumulative effects of heating caused by successive starts at short intervals is not taken into account in determining the overload trip setting." It must be pointed out that, at Ginna, the actuated valves need only be started once to perform their safety function. These valves are not subject to "successive starts at short intervals." This must be considered when attempting to apply Regulatory Guide 1.106 to the Ginna motor-operated valves.

2. The NRC assessment states that a review of the Ginna docket did not indicate that the trip point settings of safety-related MOVs were established in favor of completing the safety function. Although it is true that this information is not on the docket, since Regulatory Guide 1.106 was never applied to the Ginna design, it is also true that we were not provided an opportunity to discuss the basis for the trip settings with the NRC reviewers. The Ginna design uses ambient compensated overload relays. Based on an initial review of the thermal overload protection settings for Ginna, it does appear that settings were picked to conservatively ensure the functioning of the valve, rather than for valve protection. It thus appears that Criterion (2) is met in many instances. RG&E will evaluate all required MOVs to determine if this is the case.

   It is also important to note that, in the Ginna design, there are no instances where a single motor-operated valve is required to operate to ensure the performance of a required safety function. Either another air or motor-operated valve, a closed system, or an alternative method is available to perform the required safety functions. A single failure of a thermal overload protection device could thus be tolerated.

3. Criterion (3), dealing with the use of torque switches and limit switches in series, is not listed in any of the given references, and no basis for its inclusion is given. Furthermore, it does not appear to be related to the topic of this assessment. Thus, criterion (3) should be deleted from this topic evaluation.

Enclosure 2

SEP Topic V-11.A - "Requirements for Isolation of High and Low Pressure Systems".

The NRC description of the Ginna facility is not entirely correct. Further, there is no reference to a number of previous transmittals between RG&E and the NRC concerning this topic. Specific comments are:

1. The introduction states that BTP RSB 5-1 contains the current licensing criteria for this system. However, Regulatory Guide 1.139 would seem to supersede BTP RSB 5-1, and thus should be referenced. Regulatory Guide 1.139 (Draft 2, Proposed Rev. 1, 2/25/80) has specifically deleted the requirement for diverse interlocks for the RHR isolation valves.

2. Although as noted in Section 3.1, the outboard RHR isolation valves (701, 720) do not have interlocks, the valves are keylocked closed with power removed. The key is under the administrative control of the shift supervisor. It would not be possible to inadvertently open these valves; a series of deliberate actions would be required. When taken together with the pressure interlocks provided for the inboard valves (700, 721), it is considered that sufficient protection is provided in the Ginna arrangement to prevent overpressurization of the RHR system. The intent of Criterion 2.1(1)(b) is thus met.

3. Section 3.1 also concludes that the Ginna design does not meet current criteria, in that the isolation valves will not automatically close if RCS pressure exceeds RHR design pressure. This deviation from current criteria has already been addressed in the NRC's Safe Shutdown Evaluation, transmitted to RG&E on November 14, 1980. In section 4.2 of that evaluation, it is stated that "...The deviation regarding lack of automatic closure for the RHR isolation valves is acceptable based on the administrative controls which the licensee provides for operation of these valves, coupled with the RHR system high pressure alarm at 550 PSIG and the RCS interlock pressure alarm at 410 PSIG. These alarms provide adequate assurance that the operator action required by procedure will be taken to shut the isolation valves when RCS pressure is increasing towards the RHR design pressure." The intent of Criterion 2.1.(1)(c) is thus met.

4. Section 3.2 of the assessment states that the hot leg high pressure safety injection valves open upon receipt of a safety injection signal. These valves are locked closed, with power removed, and are not required to

open to mitigate the consequences of an accident. The valves were locked in position in accordance with Amendment No. 16 to the Ginna Technical Specifications, dated May 14, 1975. The fact that the hot leg SI lines are not subject to RCS pressure was correctly identified in the original SEP assessment of this topic, dated December 21, 1978. Subsequent communication concerning the "Event V" isolation valve configurations at Ginna, via RG&E letter dated March 14, 1980, properly did not include these lines in the required leak-testing program.

Also included in this March 14 letter was a commitment to develop and implement testing of the high head safety injection system check valves to the cold legs, if required. RG&E has developed this testing procedure, and has incorporated it into the Ginna Startup Procedure.

When corrections are made to the assessment concerning the valve arrangements for the SI system interfaces with the RCS, compliance with current regulatory criteria will be apparent.

5. The discussion of the CVCS in Section 3.3 is incorrect. The letdown portion of the line is orificed at the RCS pressure boundary (inside containment). This prevents high pressure from affecting the low pressure portions of the CVCS. The pressure relief valve (RV 203) inside containment discharges to the Pressurizer Relief Tank, and is sized larger than the capacity of the three orifices. There is, therefore, no need for pressure interlocks on the air-operated isolation valves, since CVCS overpressurization is already precluded by the system design and arrangement.

   The discharge of the CVCS is not a low pressure system (it is rated for RCS design pressure). It, therefore, does not need to be addressed at all. All of this information was previously transmitted to the NRC in response to the original assessment of this topic by an RG&E letter of January 25, 1979.

Enclosure 3

SEP Topic VI-7.C.1 - Independence of Redundant Onsite Power Systems

1. The A.C. system description is generally accurate, except that safety injection pump SI-1C is automatically loaded onto emergency bus 16, if bus 14 is not energized. Interlocks are installed to prevent the inadvertent paralleling of the redundant sources.

2. The d.c. system assessment, although correct, does not respond to information provided in Reference 3 (RGE letter, April 18, 1979) and the subsequent RG&E letter of August 10, 1979. Although the battery charger system does not comply with the wording of the independence criteria for the manual tie between redundant trains, RG&E has attempted to show that proper independence can be maintained. This current assessment merely repeats the previous NRC findings, without considering the RG&E responses. This should be done.

3. The Ginna 125 V DC control power system does have seven automatically transferred loads. However, redundant fuses (in series) are sized and coordinated to prevent a load fault from affecting both redundant safeguards "trains".

Enclosure 4

SEP Topic VI-7.F, Accumulator Isolation Valves - Power and Control System Design

Although it is true that the valve position indications for MOVs 841 and 865 are not redundant, it does not follow that the Ginna arrangement is inherently single-failure prone. Procedures require that these valves be opened prior to attaining criticality, and power removed. It would thus require the failure of the operator to perform this function, as well as the failure of the valve position indication, for a potentially unsafe condition to exist. Further, these valves are provided a confirmatory safety injection signal to open, in the event of an accident.

It is, therefore, considered that the arrangement and design of the accumulator isolation valves at Ginna is acceptable.

Enclosure 5

SEP Topic VIII-3.B - DC Power System Bus Voltage Monitoring and Annunciation

The description of the dc system monitoring at Ginna is correct. However, no specific justification is given for requiring the additional indications and alarms. Reference 3 has not been made available to RG&E for review and comment. SRP Section 8.3.2 does not provide any specific examples of parameters to be monitored.

It is considered that the present dc monitoring systems, together with the periodic testing performed on the dc system, provide sufficient indication of the readiness of the dc systems to perform their safety function. The addition of indications and annunciations in the control room must be carefully evaluated, to ensure that an overabundance of marginally-important information not mask the essential parameters needed by the operator. This is particularly important in light of the limited remaining space on the Ginna control board, and in light of the forthcoming control board reviews (Action Plan item I.D.1). Until the need for this additional information is demonstrated, RG&E does not propose to add the suggested indications and alarms.