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ACCESSION NBR:9906210069 DOC.DATE: 99/06/11 NOTARIZED: NO DOCKET # FACIL:50-244 Robert Emmet Ginna Nuclear Plant, Unit 1, Rochester G 05000244 AUTH.NAME AUTHOR AFFILIATION Rochester Gas & Electric Corp. MECREDY, R.C. RECIPIENT AFFILIATION RECIP.NAME VISSING, G.S.

SUBJECT: Responds to NRC RAI re licensee GL 96-05 program.Encl info verifies that util is implementing provisions of JOG program on MOV periodic verification.

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05000244 NOTES:License Exp date in accordance with 10CFR2,2.109(9/19/72).

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ROBERT C. MECREDY Vice President Nuclear Operations

June 11, 1999

U.S. Nuclear Regulatory Commission Document Control Desk Attn: Guy S. Vissing Project Directorate I-1 Washington, D.C. 20555

Subject: Response to RAI concerning GL96-05 R. E. Ginna Nuclear Power Plant Docket No. 50-244

Dear Mr. Vissing:

This letter is in response to a request for additional information regarding our Generic Letter 96-05 program, dated February 3, 1999. This information verifies that RG&E is implementing the provisions of the Joint Owners Group (JOG) Program on MOV Periodic Verification. This submittal was delayed from its original due date in order to incorporate testing data developed during the 1999 Refueling Outage.

Very truly yours,

Robert C. Mecredy

Attachment

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PDR

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 xc: Mr. Guy S. Vissing (Mail Stop 8C2) Project Directorate I-1 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission Washington, D.C. 20555.

> Regional Administrator, Region I U.S. Nuclear Regulatory Commission 475 Allendale Road King of Prussia, PA 19406

> > PDR

U.S. NRC Ginna Senior Resident Inspector

Attachment: RG&E Responses to NRC Request for Additional Information regarding GL 96-05 dated 2/3/99.

NRC Question 1:

In NRC Inspection Report No. 50-244/98-06, the NRC staff closed its review of the motor-operated valve (MOV) program implemented at R.E. Ginna Nuclear Power Plant (Ginna) in response to Generic Letter (GL) 89-10, "Safety-Related Motor-Operated Valve Testing and Surveillance." In the inspection report, the NRC staff discussed certain aspects of the licensee's MOV program to be addressed over the long term. For example, the inspectors noted that the licensee had established plans to perform additional dynamic tests or use the Electric Power Research Institute (EPRI) Performance Prediction Model (PPM) to provide a long-term basis for the predicted thrust and torque requirements applied to selected valves in Groups B, D, and E. The licensee should provide a summary status of the actions taken to address this specific long-term aspect of the MOV program at Ginna noted in the NRC inspection report.

RG&E Response 1:

The long term actions to address selected valves in groups B, D and E began immediately following receipt of initial NRC comments on Motor-Operated Valve Qualification Program Plan Attachment K "Calculation Assumption Verification Criteria" Revision 0. Initially, valve groups were created based on similar valve characteristics with the final grouping criteria being valve type, size and ANSI class. Although this was considered a feasible method, there was not enough in house data available to support this method. A reevaluation of the process was performed and it was decided that the Ginna program would group valves with identical gate or globe characteristics and similar design basis system conditions. This would help to ensure that a bounding valve factor for a given valve type was selected. The valves were regrouped, analyzed and long term actions assigned as detailed in Motor-Operated Valve Qualification Program Plan Attachment K "Calculation Assumption Verification Criteria" Revision 1. Using this methodology, group B now becomes group AD1. Group D now becomes groups C4, C5, C6, C7, V3 and R1. Group E now becomes groups V1 and V2.

Group AD1 consists of seven valves 857A, 857B, 857C, 860A, 860B, 860C and 860D. The long term resolution approach was to perform D/P testing on 857C and 860A/B/C/D. Current status is as follows:

857A Sufficient D/P test data is available. In addition, an EPRI PPM hand calculation has been performed and the valve is currently set to meet the EPRI PPM value.

- 857B Sufficient D/P test data is available. This valve is currently in the JOG program. In addition, an EPRI PPM hand calculation has been performed and the valve is currently set to meet the EPRI PPM value.
- 857C Sufficient D/P test data is available. In addition, an EPRI PPM hand calculation has been performed and the valve is currently set to meet the EPRI PPM value.
- 860A,B,C,D A walk down of the valves and system determined that sufficient D/P testing data is unattainable. An EPRI PPM hand calculation has been performed and the valves are currently set to meet the EPRI PPM value.

Group C4 consists of one valve, MOV 4670. Sufficient D/P test data is available, and a long term valve factor has been applied.

Group C5 consists of two valves, MOVs 738A and 738B. Sufficient D/P test data is available and a long term valve factor has been applied. In addition, the torque switch settings were reset last year to improve the close margin.

Group C6 consists of one valve, MOV 4664. Sufficient D/P test data is available, and a long term valve factor has been applied.

Group C7 consists of one valve, MOV 4615. Sufficient D/P test data is available, and a long term valve factor has been applied.

Group V3 consists of two valves, MOVs 700 and 701. These valves do not meet the general requirements of GL 89-10 but are being administratively treated as such. System alignment prevents these valves from being D/P tested. A major valve inspection was completed during the 1999 spring refueling outage. The valves were found to be in excellent condition. Internal measurements were made to assist in performing an EPRI PPM calculation in the future.

Group R1 consists of one valve, MOV 4616. Sufficient D/P test data is available, and a long term valve factor has been applied.

Group V1 consists of two valves, MOVs 871A and 871B. Sufficient D/P test data is available, and a long term valve factor has been applied.

Group V2 consists of two valves, MOVs 852A and 852B. System alignment prevents these valves from being D/P tested. A major valve inspection was performed during the 1999 spring refueling outage and a hole was drilled in the disk to address potential pressure locking concerns. The valves were found to be in excellent condition. Internal measurements were made to assist in performing an EPRI PPM calculation in the future.

NRC Question 2:

In a letter dated November 18, 1996, the licensee stated its commitment to implement the Joint Owners Group (JOG) Program on MOV Periodic Verification in response to GL 96-05. The JOG program specifies that the methodology and discrimination criteria for ranking MOVs according to their safety significance are the responsibility of each participating licensee. As Ginna is a pressurized-water reactor (PWR) nuclear plant designed by Westinghouse, is the licensee applying the Westinghouse Owners' Group (WOG) methodology for ranking MOVs based on their safety significance as described in WOG Engineering Report V-EC-1658-A (Revision 2, dated August 13, 1998), "Risk Ranking Approach for Motor-Operated Valves in Response to Generic Letter 96-05," and the NRC safety evaluation dated April 14, 1998? If not, the licensee should describe the methodology used for risk ranking MOVs at Ginna in more detail, including a description of (1) the process used to develop sample lists of high-risk MOVs from other Westinghouse plants; and (2) how expert panels were used to evaluate MOV risk significance.

RG&E Response 2:

RG&E did use the methodology described in WOG Engineering Report V-EC-1658-A to rank MOVs based on their safety significance. A combination of PSA risk-ranking and Maintenance Rule expert panel determinations was used to compile this list. RG&E is an active member of the JOG, with two valves (MOVs 857B and 9629A) designated as "JOG valves". Both valves have been tested twice, most recently during the 1999 refueling outage, and the data is being transmitted to JOG. The third and final test is scheduled for the year 2000.

NRC Question 3:

The JOG program focuses on the potential age-related increase in the thrust or torque required to operate valves under their design-basis conditions. In the NRC safety evaluation dated October 30, 1997, on the JOG program, the NRC staff specified that licensees are responsible for addressing the thrust or torque delivered by the MOV motor actuator and its potential degradation. The licensee should describe the plan at Ginna for ensuring adequate ac and dc MOV motor actuator output capability, including consideration of recent guidance in Limitorque Technical Update 98-01 and its Supplement 1.

RG&E Response 3:

As previously stated, R.E. Ginna Nuclear Power Plant is dedicated to the Joint Owners Group Program on MOV Periodic Verification in response to GL 96-05. Program aspects are being integrated into the present active curriculum. In addition, steps are being taken to address Limitorque Technical Bulletin 98-01 and Supplement 1. The following table reflects our action plan and the current status of each item:

Review JOG program for impact on present programCompleteReview Limitorque Technical Bulletin 98-01 and Supplement 1 for impact on programCompleteRevise MOV calculations incorporating Limitorque TB 98-01CompleteRevise margin table incorporating new calc valuesCompleteIdentify MOVs in need of a margin increaseCompleteA total of eight valves require a motor upgrade to improve margin as a result of Limitorque TB 98-01.CompleteTwo other valves require a procedure administrative adjustment in order to improve margin as a result of Limitorque TB 98-01Procedures have been updated. Design Basis Analysis and Design Basis Trust Cales to be updated by December 1999.Review/Rework/Develop weak link analysis for motor upgradesCompleteQualification Program to full changesCompleteObtain a specific configuration review from Limitorque for those SMB-1 valves with a 66:1 ratio (2 MOV's GL 89-10 sufficient margin exists for this concern)Waiting for Limitorque ResponseIncorporate all changes into the Motor-Operated Valve Qualification Program Plan95% complete -	Action Item	Status		
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member for reviewing		member for reviewing		
all JOG data		all JOG data		

With respect to DC actuators, there are only two in the GL 89-10 program. These two valves are stroked under pressure four times a year. In addition, differential pressure testing was completed for both valves and a long term valve factor has been applied. These valves are low risk with high margin but are inspected/tested at a more frequent interval due to their service and environment.

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