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ROBERT C. MECREDDY
Vice President
Nuclear Operations

September 5, 2002

Mr. Robert L. Clark
Office of Nuclear Regulatory Regulation
U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
11555 Rockville Pike
Rockville, MD 20852

Subject: Response to Bulletin 2002-02, *Reactor Pressure Vessel Head and Vessel Head Penetration Nozzle Inspection Programs*
R. E. Ginna Nuclear Power Plant
Docket No. 50-244

Dear Mr. Clark:

Bulletin 2002-02 was issued on August 9, 2002 to all holders of operating licenses for active pressurized water reactors (PWRs). The subject bulletin requires the PWR addressees to provide certain information related to the reactor pressure vessel head and vessel head penetration nozzle inspection programs within 30 days of the date of the bulletin. The enclosure to this letter provides the required information for Ginna Station. Also, since RG&E will replace the reactor pressure head during the Fall 2003 Refueling Outage as described in the enclosure, the information required by the bulletin to be submitted within 30 days after restart following the next inspection of the reactor pressure vessel head and penetration nozzles will not be provided for several years. That is, using Table 1 from the bulletin, the first scheduled inspection of the replacement reactor pressure vessel head is not expected to occur until at least the Fall of 2006.

I declare under penalty of perjury under the laws of the United States of America that I am authorized by RG&E to make this submittal and that the foregoing is true and correct.

Any questions concerning this submittal should be directed to Mr. Brian Flynn, Manager, Primary/Reactor Systems at (585) 771-3734.

Executed on September 5, 2002

Very truly yours,

Robert C. Mecreddy

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Enclosure

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xc: Mr. Robert L. Clark (Mail Stop O-8-C2)
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U.S. NRC Ginna Senior Resident Inspector

Bulletin 2002-02 requires the following information be provided:

(1) Within 30 days of the date of this bulletin:

- A. PWR addressees who plan to supplement their inspection programs with non-visual NDE methods are requested to provide a summary discussion of the supplemental inspections to be implemented. The summary discussion should include EDY, methods, scope, coverage, frequencies, qualification requirements and acceptance criteria.**
- B. PWR addressees who do not plan to supplement their inspection programs with non-visual NDE methods are requested to provide a justification for continued reliance on visual examinations as the primary method to detect degradation (i.e., cracking, leakage, or wastage). In your justification, include a discussion that addresses the reliability and effectiveness of the inspections to ensure that all regulatory and technical specifications requirements are met during the operating cycle, and that addresses the six concerns identified in the Discussion Section of this bulletin. Also, include in your justification a discussion of your basis for concluding that unacceptable vessel head wastage will not occur between inspection cycles that rely on qualified visual inspections. You should provide all applicable data to support your understanding of the wastage phenomenon and wastage rates.**

RESPONSE:

RG&E is currently scheduled to replace the Ginna Reactor Pressure Vessel Closure Head (RPVCH) during its next scheduled Refueling Outage in the Fall 2003. RG&E believes that examinations and calculations performed in response to NRC Bulletins 2001-01 and 2002-01 provide reasonable assurance that degradation of the current Ginna RPVCH is not occurring. Since there is no planned outage prior to the RPVCH replacement, RG&E does not propose to enhance its inspection program.

With respect to the replacement RPVCH, RG&E has incorporated several design and manufacturing process improvements as a result of the lessons learned both within the United States and the international PWR industry. These changes are expected to significantly improve or eliminate susceptibility of the RPVCH to the degradation mechanisms described in the NRC bulletin, and to improve the inspectability of the RPVCH. These improvements include material selection (thermally treated Alloy 690), weld size reduction, weld deposition method, and surface conditioning. Additionally, significantly improved access to the bare metal exterior surface of the RPVCH is incorporated in the replacement design.

Based on industry experience to date, RG&E has not concluded that visual inspection alone is insufficient to manage this issue for the replacement RPVCH. We also believe that sufficient test and operating experience data exists to justify reduced inspection frequencies from those provided in the Example Supplemental Inspection Table contained within the NRC bulletin. For example, this table would require Ultrasonic Testing of the CRDM Nozzle Base material and surface examination of the J-groove weld within 5 years for the replacement RPVCH (i.e., < 8 EDY). However, given the lower susceptibility of thermally treated Alloy 690 to cracking, this

frequency seems unnecessary. Also, RG&E will have performed volumetric examinations of the penetration material and surface examination of the J-groove welds as part of the manufacturing process for the replacement RPVCH which provides a baseline.

RG&E actively participates in several industry forums to assess this issue including the EPRI MRP, NEI, and ASME code committee. Information obtained from these forums is continually incorporated into RG&Es inspection programs. It is also expected that new information will become available as additional inspections and analyses are performed. These would be expected to impact the supplemental inspection frequencies and methods identified in the bulletin.

RG&E will perform 100% Bare Metal Visual Examinations of the RPVCH in accordance with the bulletin table in the Fall of 2006. Any deviations from the frequencies, methods, or scope as provided in the bulletin table will be submitted to the NRC prior to exceeding the frequencies listed. Since the inspection capabilities are expected to have changed between now and the Fall of 2006, RG&E will submit to the NRC details concerning the qualification requirements and acceptance criteria for these inspections by September 1, 2005.