

April 3, 2002

LICENSEE: Rochester Gas and Electric Corporation (RG&E)

FACILITY: R. E. Ginna Nuclear Power Plant

SUBJECT: SUMMARY OF MARCH 29, 2002, CONFERENCE CALL REGARDING RG&E POST-INSPECTION RESULTS OF THE REACTOR PRESSURE VESSEL HEAD (TAC NO. MB4548)

On March 29, 2002, a conference call was held with members of the U.S. Nuclear Regulatory Commission (NRC) staff and representatives from Rochester Gas and Electric Corporation, the licensee for Ginna Nuclear Power Plant. The list of participants is enclosed. The purpose of this call was to discuss the licensee's preliminary results of their inspection of the reactor pressure vessel head.

The reactor pressure vessel head inspection consisted of: 1) a 100% visual inspection of the block insulation located on top of the reactor pressure vessel head inside the shroud support ring; 2) ultrasonic testing to verify the thickness of the head around the center control rod drive mechanism (CRDM) penetration nozzle; and 3) ultrasonic testing of that portion of the head located outside the shroud support ring where four nearby instrument ports had previously experienced boric acid leakage. The licensee asserted that a potential through-wall crack in a penetration nozzle, J-groove weld or leakage from above the reactor pressure vessel head would lead to accumulation of boric acid and corrosion products at the head/insulation interface, in the annulus between insulation and nozzle, and above the insulation. The licensee also postulated that if the boric acid deposits and corrosion products were to accumulate at the head/insulation interface, the accumulation would eventually exert sufficient force on the insulation to cause displacement or cracking.

Based on the results of the visual inspection, the licensee stated that the block insulation within the shroud support ring was in very good condition with only minor cracks or gaps in the insulation. The licensee also stated that some minor staining (brown spots) was present on top of the insulation and that white shading was also observed on certain CRDM nozzles. However, there was no evidence of boric acid deposits or corrosion products on the outside surface of the insulation and no visible indication of distortion (displacement or cracking) of the block insulation due to boric acid/corrosion product uplifting.

In areas where the insulation was damaged (stained, missing or cracked), the licensee removed small pieces of the insulation to expose the bare metal of the head. These areas showed no evidence of boric acid deposits nor any evidence of degradation. Upon careful examination of the discolored areas, the licensee determined that the brown coloring on top of the block insulation was due to previous conoseal leaks from instrument ports and was not the result of corrosion products. The white coloring observed on some of the nozzles (near the canopy seal weld) was due to white developer overspread while performing Section XI weld inspections and was not boric acid deposits. The licensee also analyzed block insulation samples (i.e., the ones removed to expose the bare metal of the head) and determined that no

significant radioactivity was present (providing some assurance that no significant leakage had occurred).

In addition to the above, bare metal inspections of several penetration nozzles were performed using a video camera to look into the annulus between the block insulation and nozzle. The licensee stated that the video inspection did not reveal any crystalline deposits around the penetration nozzles. The licensee also removed the block insulation from the head outside the shroud support ring to perform bare metal inspection of the head in this region. No boric acid deposits or corrosion products were observed coming out of the shroud support ring from under the insulation.

The ultrasonic testing (UT) examination on the center CRDM penetration nozzle from beneath the head indicated that head thickness was well within design limits and that there was no physical evidence of reactor vessel head corrosion (i.e., no material loss). The licensee also performed UT examination for wall thickness of the reactor pressure vessel head outside the shroud support ring on the downhill side of four instrument ports. The results indicated that the head thickness was well within design limits.

Following the licensee's presentation, the NRC staff stated that it did not have any further questions. The licensee stated that a formal letter will be sent to the NRC documenting the results of the reactor vessel head inspection within 30 days after plant restart as required by NRC Bulletin 2002-01. "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity."

***/RA/***

Robert L. Clark, Project Manager, Section 1  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-244

Enclosure: As stated

cc w/encl: See next page

significant radioactivity was present (providing some assurance that no significant leakage had occurred).

In addition to the above, bare metal inspections of several penetration nozzles were performed using a video camera to look into the annulus between the block insulation and nozzle. The licensee stated that the video inspection did not reveal any crystalline deposits around the penetration nozzles. The licensee also removed the block insulation from the head outside the shroud support ring to perform bare metal inspection of the head in this region. No boric acid deposits or corrosion products were observed coming out of the shroud support ring from under the insulation.

The ultrasonic testing (UT) examination on the center CRDM penetration nozzle from beneath the head indicated that head thickness was well within design limits and that there was no physical evidence of reactor vessel head corrosion (i.e., no material loss). The licensee also performed UT examination for wall thickness of the reactor pressure vessel head outside the shroud support ring on the downhill side of four instrument ports. The results indicated that the head thickness was well within design limits.

Following the licensee's presentation, the NRC staff stated that it did not have any further questions. The licensee stated that a formal letter will be sent to the NRC documenting the results of the reactor vessel head inspection within 30 days after plant restart as required by NRC Bulletin 2002-01. "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity."

**/RA/**

Robert L. Clark, Project Manager, Section 1  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-244

Enclosure: As stated

cc w/encl: See next page

**DISTRIBUTION**

PUBLIC	PD1-1 Rdg File	J. Zwolinski/T. Marsh	W. Bateman
R. Clark	A. Hiser	K. Karwoski	J. Munday
S. Little	S. Bloom	D. McCain	I. Jung
D. Lew, RGI	M. Evans, RGI	B. Platchek, RGI	T. Bergman, RGI
W. Lanning, RG1	C. Welch, RGI	ACRS	OGC
J. Collins	E. Gray, RGI	L. Doerflein, RGI	

Accession No.: ML020940505

OFFICE	PDI-1/PM	PDI-1/LA	EMCB/PM	PD1-1/(A)SC
NAME	RClark	SLittle	SBloom	JMunday
DATE	4/3/02	4/3/02	4/3/02	4/3/02

**OFFICIAL RECORD COPY**

R.E. Ginna Nuclear Power Plant

cc:

Christopher Welch, Sr. Resident Inspector  
R.E. Ginna Plant  
U.S. Nuclear Regulatory Commission  
1503 Lake Road  
Ontario, NY 14519

Mr. Paul Eddy  
New York State Department of  
Public Service  
3 Empire State Plaza, 10th Floor  
Albany, NY 12223

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

Mr. William M. Flynn, President  
New York State Energy, Research,  
and Development Authority  
Corporate Plaza West  
286 Washington Avenue Extension  
Albany, NY 12203-6399

Charles Donaldson, Esquire  
Assistant Attorney General  
New York Department of Law  
120 Broadway  
New York, NY 10271

Daniel F. Stenger  
Ballard Spahr Andrews & Ingersoll, LLP  
601 13<sup>th</sup> Street, N.W., Suite 1000 South  
Washington, DC 20005

Ms. Thelma Wideman, Director  
Wayne County Emergency Management  
Office  
Wayne County Emergency Operations  
Center  
7336 Route 31  
Lyons, NY 14489

Ms. Mary Louise Meisenzahl  
Administrator, Monroe County  
Office of Emergency Preparedness  
111 West Falls Road, Room 11  
Rochester, NY 14620

**LIST OF MEETING PARTICIPANTS**

**March 29, 2002**

**NRC**

Robert Clark  
Steven Bloom  
Kenneth Karwoski

NRR  
NRR  
NRR

Larry Doerflein  
Christopher Welch  
Michele Evans  
Edwin Gray

Region 1  
Region 1  
Region 1  
Region 1

**RG&E**

Robert Mecredy  
John Smith

Joe Widay  
Mark Flaherty

Paul Lewis  
Gerry Geiken

Al Butcavage