

Dave Holm
Plant General Manager

R.E. Ginna Nuclear Power Plant, LLC
1503 Lake Road
Ontario, New York 14519-9364
585.771.5205
Dave.A.Holm@constellation.com



December 21, 2006

U. S. Nuclear Regulatory Commission
Washington, DC 20555

ATTENTION: Document Control Desk

SUBJECT: R.E. Ginna Nuclear Power Plant
Docket No. 50-244

2006 Reactor Pressure Vessel Head Inspection

REFERENCE: (a) Letter from R.C. Mecredy, RG&E, to Office of the Secretary of the Commission, NRC, "Response to First Revised Order Establishing Interim Inspection Requirements for Reactor Pressure Vessel Heads at Pressurized Water Reactors" dated March 8, 2004

In Reference (a) R.E. Ginna Nuclear Power Plant, LLC (Ginna LLC) committed to perform visual inspections during each refueling outage to identify potential boric acid leaks from pressure retaining components above the reactor pressure vessel head. In addition, Ginna LLC also committed that if boron deposits are discovered on the surface of the reactor pressure vessel head or related insulation, we would perform inspections of the affected head surface and penetrations appropriate to the conditions found to verify the integrity of the affected area and penetrations prior to returning the plant to operations. Ginna LLC committed to submit a report to the NRC detailing results if leaks or boron deposits were found and the results of the follow-up inspections within 60 days after returning the plant to operation. There are no new commitments contained in this submittal.

Attachment 1 provides a description of the results of the inspections performed in the 2006 Refueling Outage (RFO).

Should you have questions regarding the information in this submittal, please contact Mr. Robert Randall at (585) 771-5219 or Robert.Randall@constellation.com.

Very truly yours,

A handwritten signature in black ink, appearing to read "Dave Holm", written over a horizontal line.

David A. Holm

A101

1001691

STATE OF NEW YORK :
: TO WIT:
COUNTY OF WAYNE :

I, David A. Holm, being duly sworn, state that I am Plant General Manager, R.E. Ginna Nuclear Power Plant, LLC (Ginna LLC), and that I am duly authorized to execute and file this request on behalf of Ginna LLC. To the best of my knowledge and belief, the statements contained in this document are true and correct. To the extent that these statements are not based on my personal knowledge, they are based upon information provided by other Ginna LLC employees and/or consultants. Such information has been reviewed in accordance with company practice and I believe it to be reliable.

David A. Holm

Subscribed and sworn before me, a Notary Public in and for the State of New York and County of Monroe, this 21 day of December, 2006.

WITNESS my Hand and Notarial Seal:

Sharon L. Miller
Notary Public

My Commission Expires:

12-21-10
Date

SHARON L. MILLER
Notary Public, State of New York
Registration No. 01M16017755
Monroe County
Commission Expires December 21, 20 10



Attachments: (1) 2006 Reactor Pressure Vessel Head Inspection Results

cc: S. J. Collins, NRC
P.D. Milano, NRC
Resident Inspector, NRC (Ginna)

ATTACHMENT 1

2006 Reactor Pressure Vessel Head Inspection Results

Ginna LLC performed a visual inspection of the reactor pressure vessel head region during the 2006 Refueling Outage (RFO). The inspection revealed boric acid stains on the control rod drive mechanism (CRDM) 32 at the base of the latch housing assembly. The indication appeared as faint white fluid streaks on the outside of the control rod drive mechanism latch housing pressure boundary on the lower portion of the latch assembly housing. The CRDM 32 area was viewed through the radiation shield door located on the North side of the reactor vessel head assembly upgrade package (HAUP) area. The source of the streaking appeared to have come from the area above where the streaking was observed. Potential sources of leakage in the region above the area under investigation include the latch housing to rod travel housing omega seal weld, the rod travel housing to rod travel housing cap canopy seal weld, or the CRDM pressure boundary vent which is located at the very top of the rod travel housing cap underneath the CRDM lifting lug.

Latch Housing to Rod Travel Housing Omega Seal Weld Inspection

The inspections of the visible omega seal weld area of the latch housing to rod travel housing reveal no indications of leakage at this junction. This area was modified in 2003 during the replacement of the Ginna reactor vessel closure head to support this inspection. Openings were provided in the spacer foot assembly which positions the MRPI coil at the same elevation as the original configuration of the MRPI coil stack in relation to the position of the CRDM housing. These openings allow a leak path for the omega seal weld area of the latch housing to rod travel housing junction, which then could be seen from above through an access port on top of the HAUP assembly.

The range of visual access for the target area varied between 180 and 270 degrees around the circumference of the latch housing and rod travel housing omega seal weld. Streaks below the CRDM 32 coil stack were included in this range of view on the east and west sides. No visible signs of leakage were noted. Additional inspections were completed on all visible areas for all CRDM locations.

Rod Travel Housing to Rod Travel Housing Cap Canopy Seal Weld Inspection

Inspections were performed for the canopy seal welds at the rod travel housing to rod travel housing cap, as well as the threaded area of the CRDM lifting devices used to install the CRDM's on the head assembly during the 2003 RFO. A water spot was noted on one assembly. The water spot was not connected, that is, no trail to the canopy seal area was observed.

It is important to note that the replacement reactor vessel closure head, now in place at Ginna was staged outside during the 2003 RFO prior to placement in containment, and that the protective cover provided was dislodged at one point by an overnight rain and wind storm exposing portions of the replacement head to the elements. Isolated water spots on the stainless

steel CRDM's could be expected provided they do not connect to seal welds by streams, and no visible signs of boric acid leakage are observed at the seal weld. Water spots do not present a boric acid type concern. Therefore, it is reasonable to conclude that the water spot came from a different source and no further investigation was necessary.

CRDM Pressure Boundary Vent Inspection

The CRDM pressure boundary vent is located at the very top of the rod travel housing cap underneath the CRDM lifting lug. General area examinations, from one of the access panels of the HAUP, were performed for all CRDMs. The joint area of the rod travel housing cap to rod travel housing canopy seal weld and the CRDM lifting device were inspected for leakage from the CRDM vent plugs. The inspections showed no evidence of boric acid leakage.

Additional Considerations

Inspections were also performed above the area of the latch housing assembly at the seal welds. The inspections showed no evidence of boric acid leakage. The inspection revealed no other areas of interest, and no visible signs of boric acid type indications.

A sample of the leakage residue was analyzed. The chemical analysis determined that the white streaks seen on CRDM 32 contained the isotope Sb-125 (Antimony). Antimony in a sample would be indicative of a spray or spill during shutdown conditions, for example, after peroxide addition was used following crud burst operations or during vacuum fill operations. CRDM 32 is located in the vicinity of a manual reactor head vent valve which is used during vacuum fill operations associated with plant operations startup procedures. It should also be noted that the shield doors do not provide a water tight seal to over spray or fluid spills.

Conclusion

Based on the chemistry investigations and inspections performed, reasonable assurance is provided that the streaking on the surface of CRDM 32 observed during RFO 2006 was not from a primary RCS pressure boundary leak from above the latch housing but from previous RCS venting operations conducted in 2005.

The CRDM 32 residue streaks were cleaned and the CRDM pressure boundary latch housing is free of streaks. A small trail of dry boron residue remains on the adjacent non - pressure boundary CRDM coil stack assembly which could not be removed. The trail terminates at the base of the removable coil and poses no corrosion concern on the pressure boundary.

Based on these inspection results, no pressure boundary leakage was evident from the omega seal welds, or the canopy seal welds or vents associated with the CRDM's above the suspect latch housing area or any other CRDM seal weld.