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**Date:** 09/18/2006 2:48:01 PM  
**Subject:** BMN Inspection Volumetric Inspections

Ganesh,

Per your recent request, the attached letter details the bottom mounted nozzle volumetric inspections completed and reported to the MRP.

Craig

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# MRP Materials Reliability Program\_\_\_\_\_MRP 2006-032

(via email)

September 15, 2006

To: MRP Technical Advisory Group  
Subject: Bottom Mounted Nozzle (BMN) Inspection Summary (Summer 2006 Update)

This letter provides a summary of US and international BMN volumetric inspection results.

## US PWR BMN Volumetric Inspection

### *Inspections Performed*

Fifty-eight of the US PWRs include bottom mounted nozzles in their design. Based on information provided to the MRP through the spring 2006 outage season, the following twelve plants (since the findings at STP-1) have inspected the Alloy 600 bottom mounted nozzle base material with ultrasonic methods. The inspection probes also typically include eddy current capabilities. The NDE methods used were demonstrated in the MRP Alloy 600 BMN blind demonstration program. Note that several plants were unable to inspect one or two of their nozzles.

Byron 1	Catawba 2	McGuire 2	Turkey Point 3
Callaway	Diablo Canyon 1	Surry 1	Turkey Point 4
Catawba 1	Diablo Canyon 2	Surry 2	Wolf Creek

### *Results*

No indications of in-service degradation were identified in these inspections.

The thirteen US inspections have examined twenty percent (716 of a total 3095 including STP-1) of the bottom mounted nozzles in the US fleet.

## International PWR BMN Volumetric Inspection

### *Inspections Performed*

Although the MRP does not track all international BMN inspection activities, based on information that has been provided, at least 19 foreign PWRs have conducted volumetric BMN inspections.

### *Results*

No indications of in-service degradation were identified in these inspections.

Please contact me if you have any questions.

Best Regards,  
Craig Harrington  
Project Manager, EPRI MRP Assessment ITG