

**From:** [Thadani, Mohan](#)  
**To:** [Harding Jr, Thomas](#)  
**Subject:** RE: Ginna-BMI Flaw Evaluation(ME8247)  
**Date:** Wednesday, August 15, 2012 10:17:00 AM  
**Attachments:** [image001.png](#)

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Tom:

By letter dated March 16, 2012, Constellation Energy Nuclear Group (CENG), LLC, the licensee for R.E. Ginna Nuclear Power Plant (Ginna), submitted for staff review and approval a flaw evaluation, based on American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, IWB-3600, title 10 of the *Code of Federal Regulations* Section 50.55a, Paragraph (g)(4). The subject indications were found in the A86 bottom mounted instrument (BMI) penetration nozzle. The NRC staff has reviewed the request and identified a need for additional information. The NRC staff requests a response to the following request for additional information in 30 days from the date of this request.

Thank you for your support.

*Mohan C Thadani*

Senior Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation  
(301) 415-1476 [Mohan.Thadani@nrc.gov](mailto:Mohan.Thadani@nrc.gov)



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REQUEST FOR ADDITIONAL INFORMATION REGARDING  
R.E. GINNA NUCLEAR POWER PLANT  
BOTTOM MOUNTED INSTRUMENT NOZZLE FLAW EVALUATION  
DOCKET NO. 50-244

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By letter dated March 16, 2012, Constellation Energy Nuclear Group (CENG), LLC, the licensee for R.E. Ginna Nuclear Power Plant (Ginna), submitted for staff review and approval a flaw evaluation, based on American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, IWB-3600, in accordance with the provisions of Title 10 of the *Code of Federal Regulations* Section 50.55a, Paragraph (g)(4). The subject indications were found in the A86 bottom mounted instrument (BMI) penetration nozzle.

In order to complete its review of the licensee's submittal, the Nuclear Regulatory Commission (NRC) staff requires a response to the following questions:

1. The stress ratio calculated on page 3 of Attachment 1 to the submittal includes "external mechanical loads" on the BMI nozzle.
  - a) Confirm that the source of these loads (Reference 6 to the submittal) was Ginna specific.
  - b) Confirm that these loads are consistent with or bounded by the BMI penetration nozzle design loads.

2. Identify and describe the contributions to the axial membrane and bending stress of 6.2 ksi reported on page 4 of Attachment 1 to the submittal. Alternatively provide the relevant sections of the associated report.
3. The stress input for the evaluation was produced using the methodology of the original BMI nozzle fatigue evaluation cited as Reference 3 of Attachment 1 to the submittal.

Clarify why this original evaluation methodology is still valid despite changes made to plant operation, a power uprate, and a steam generator replacement, since the methodology was created.

4. Provide Reference 5 of Attachment 1 to the submittal.
5. Previous investigations of analogous welds, such as those for control rod guide tubes, have revealed that weld residual stresses remain significant even after heat-treatment.
  - a) Provide an analysis of the weld residual stresses in the location of interest.
  - b) Show that the analysis in Attachment 1 of the submittal bounds the weld residual stresses, or supplement Attachment 1 as necessary.