Duke Energy®

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February 26, 2010

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

SUBJECT: Duke Energy Carolinas, LLC (Duke)
McGuire Nuclear Station, Unit 2
Docket Number 50-370
Relief Request 09-MN-001
Response to Request for Additional Information

On March 23, 2009, Duke submitted Relief Request 09-MN-001 pursuant to 10 CFR 50.55a(g)(5)(iii), requesting relief from in-service examination requirements for a Unit 2 reciprocating charging pump to flange weld.

On October 26, 2009, the NRC electronically requested additional information regarding this relief request.

On December 14, 2009, Duke electronically requested the NRC to suspend review of this relief request due to Duke's wish to re-check this relief request for accuracy. There were no inaccuracies identified during the re-check that was performed. However, there were three wording enhancements identified that do not change the technical basis of the original relief request. The attachment contains Duke's response to the NRC's request for additional information and describes the wording enhancements.

Duke requests the NRC resume their review of this relief request and apologizes for any inconvenience this may have caused. Duke requests NRC approval of this relief request by August 16, 2010.

If there are any questions or if additional information is needed, please contact M. K. Leisure at (980) 875-5171.

Sincerely,

Regis T. Repko

A047
NRR

Attachment
xc:

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Attachment

Relief Request 09-MN-001

Response to NRC Request for Additional Information

1. *On page 3, Section VIII, paragraph 4, you stated, "The component weld was not examined by volumetric NDE methods during construction." Please provide the reason why the 2RCHP-IN weld was not inspected during construction.*

   Response:

   2RCHP-IN is a 4 inch weld connecting a pipe flange to the casing of the reciprocating charging pump. This pump was constructed in accordance with the requirements of the ASME Code, Section III, Division 1, Subsection NC, 1971 Edition through the Summer 1972 Addenda, which did not require volumetric examination of welded branch connections with a nominal pipe size of 4 inches and smaller on pumps.

2. *Had the 2RCHP-IN weld ever been inspected during the ISI program of MNS2? If not, please provide the reasons.*

   Response:

   The 2RCHP-IN weld had not been inspected during the ISI program of MNS2 because:

   1. The ASME Section XI Code, 1980 Edition, 1980 Winter Addenda, applicable to the first ISI interval, exempted this weld from examination due to size.

   2. In the second interval, the ASME Section XI Code, 1989 Edition, no addenda, required that only a 7.5% sample of class 2 welds be examined. Weld 2RCHP-IN, category C-F-1, was originally scheduled for examination during the second interval; however another weld was inadvertently examined instead. Examination of neither weld was required to meet the Code required percentage for the category.

3. *On page 3, Section VI, paragraph 1, you stated, "Due to the material and configuration, there is no viable alternative examination and ultrasonic examination would not provide additional examination coverage." Please provide the type of material of the 2RCHP-IN weld, state the material limitations, and describe in detail how the material limitations prevented inspection of this weld by UT.*

   Response:

   The material type for weld 2RCHP-IN is stainless steel. The limitation of the ultrasonic examination was due only to component configuration. There are no examination limitations due to the material.

4. *On page 3, Section VI, you stated, "There are only two welds in this segment. The only other weld in this segment was examined by UT this outage once it was discovered that 2RCHP-IN had a relevant condition exceeding acceptance standards and was limited." Please explain limited in what way.*

Response:

The examination of the second weld in the risk-informed segment NV-108A, 2RCHPSS-OUT-1, was not limited. The second weld was examined due to the Code required expansion of sample, because the examination of weld 2RCHP-IN revealed relevant conditions exceeding acceptance standards.

The limitation for weld 2RCHP-IN is explained in section IV of the relief request.

5. *Define the acronym "NV" used in the relief request.*

Response:

The acronym "NV" is Duke Energy's nomenclature for the Chemical and Volume Control System.

During the development of the response to the RAI, the following enhancements were identified:

On page 1 of the relief request, the last paragraph should be changed to read: "The item in this relief request was repaired in March 2008 and re-examined in April 2008."

On page 2 of the relief request, Section III, Applicable Code Requirement, should be changed to read: "The examination requirements for Class 1 and 2 piping welds are governed by the Risk-Informed Inservice Inspection program which is based on WCAP-14572, Revision 1-NP-A and its Supplement 2, Revision 1-NP-A. The Supplement 2, Table 4.1-1, Examination Category R-A, Risk-Informed Piping Examinations, requires 100% of the exam location to be examined per Figure IWB-2500-8(c) for Item Number R1.11. Code Case N-460 is applicable."

On page 3 of the relief request, Section VIII, Justification for Granting Relief, the third paragraph, the last sentence should be changed to read: "Leakage at this weld would likely be identified during the leak rate test for the NV system as required by Technical Specifications 5.5.3, "Primary Coolant Sources Outside Containment", on a refueling frequency."