

September 15, 2004

U. S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

ATTENTION: Document Control Desk

SUBJECT: Duke Energy Corporation
Oconee Nuclear Station Unit 3
Docket No. 50-287
Catawba Nuclear Station Unit 2
Docket Nos. 50-414

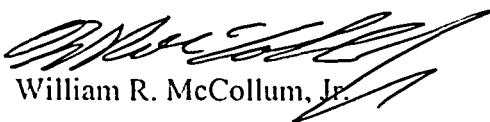
Response to Request for Additional Information
Relief Request 04-GO-001

By letter dated August 6, 2004, pursuant to 10 CFR 50.55a (a) (3) (i), Duke Energy Corporation (Duke) requested the use of an alternative to the ASME Boiler Section XI, Figures IWB-2500-7 (a) and (b), 1989 Edition with no addenda for the Reactor Pressure Vessel (RPV) examinations scheduled for the fall 2004 outages at Catawba Unit 2 and Oconee Unit 3; and the spring 2005 outages at McGuire Unit 2 and Catawba Unit 1. The NRC staff requested additional information to complete the review of the subject relief request during a teleconference with Duke on August 18, 2004. Attachment 1 provides the information requested during this call for Catawba Unit 2 and Oconee Unit 3.

Duke is requesting approval of Relief Request 04-GO-001 for Oconee Unit 3 and Catawba Unit 2 as initially requested in the August 6, 2004 submittal in order to support the fall 2004 outages.

The requested information for McGuire Unit 2 and Catawba Unit 1 is not available at this time.

Very truly yours,


William R. McCollum, Jr.

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North Carolina Electric Membership Corporation
MNS MasterFile MC-801.01 (MG01DM)
CNS MasterFile CN-801.01 (CN04DM)
ONS MasterFile ON-801.01 (ON03DM)
ELL

Attachment 1
RAI Questions and Responses for Relief Request 04-GO-001

Questions:

In order to complete a review of your relief request additional information is required. Please forward the specific RPV Nozzles affected for each plant and provide the following details in tabular format:

- 1) Component ID
- 2) Component Description (eg Recirc Loop A Outlet Nozzle to Vessel Weld @ 180 Deg Azimuth)
- 3) Nozzle Configuration (eg Code Case N-613-1 fig 2)
- 4) Full Exam coverage previously completed (eg Yes -Preservice & 1 st Interval)
- 5) Previous Weld Repair (eg NO)
- 6) Is Weld repair in Code Case Boundary (eg Yes)

Responses:

ONS-3

1	2	2	3	4	5	6
Component ID	Description	Azimuth	Code Case N-613-1 Figure	Full Exam Coverage Completed ¹	Previous Weld Repair ²	Repair in Code Case Boundary
3-RPV-WR13	Outlet Nozzle	X axis	1	Yes-PSI, 1 st and 2 nd Interval ISI	No	N/A
3-RPV-WR13A	Outlet Nozzle	Z axis	1	Yes-PSI, 1 st and 2 nd Interval ISI	No	N/A
3-RPV-WR12	Inlet Nozzle	W-X axis	1	Yes-PSI, 1 st and 2 nd Interval ISI	No	N/A
3-RPV-WR12A	Inlet Nozzle	X-Y axis	1	Yes-PSI, 1 st and 2 nd Interval ISI	No	N/A
3-RPV-WR12B	Inlet Nozzle	Y-Z axis	1	Yes-PSI, 1 st and 2 nd Interval ISI	No	N/A
3-RPV-W12C	Inlet Nozzle	Z-W axis	1	Yes-PSI, 1 st and 2 nd Interval ISI	No	N/A
3-RPV-WR54	Core Flood Nozzle	W axis	2	Yes-PSI, 1 st and 2 nd Interval ISI	No	N/A
3-RPV-WR54A	Core Flood Nozzle	Y axis	2	Yes-PSI, 1 st and 2 nd Interval ISI	No	N/A

Footnote 1: Coverage of the examination volume from the vessel shell side as shown in ASME Section XI, Figure IWB-2500-7(a) was limited due to the dual sided scanning requirements contained in ASME Section V, Article 4 which was used to examine these welds in the first and second intervals.

The outlet and inlet nozzles would be most like Figure IWB-2500-7(a) or Figure 1 in Code Case N-613-1. However, the welds are double U's instead of welded only from the outside. The core flood nozzle weld is more like IWB-2500-7(b) or Figure 2 of N-613-1 except again the configuration is a double U. As shown in the figures the main difference is the transition radius being a part of the nozzle or a part of the weld. In either case since the shell thickness is 12 inches the Ts/2 criteria of 6 inches from the edge of the weld extends into areas which are very difficult to examine due to the contour of the surface.

Footnote 2: An investigation of the weld repair issue was conducted by station personnel that confidently concluded that no weld repairs were performed since original construction. Framatome Engineering performed a design review of ONS-3 and concluded that if repairs had been performed the cavities would have been excavated to an extent to clear the defect and made suitable for manual repair. The cavity would have been predominantly in the weld metal since the defects would have been in the weld or along the weld fusion line. The weld prep would only have been enlarged to allow access along the fusion line. Excavations would have been from the OD or ID depending upon where the defect was expected to be, i.e. nearest surface. Therefore, if there were weld repairs, there is very high assurance that the actual OD or ID weld surface is the largest extent of the weld as measured from the weld centerline.

Further, the current scan plan was developed from previous data obtained during preservice inspection. This plan takes into account the weld profile on the ID and would address any weld configurations considered to be beyond design.

CNS-2

1	2	2	3	4	5	6
Component ID	Description	Azimuth	Code Case N-613-1 Figure	Full Exam Coverage Completed ¹	Previous Weld Repair ²	Repair in Code Case Boundary
2RPV-107-121B	Outlet Nozzle	22°	1	Yes-PSI and 1 st Interval ISI	No	N/A
2RPV-105-121B	Inlet Nozzle	67°	1	Yes-PSI and 1 st Interval ISI	No	N/A
2RPV-105-121A	Inlet Nozzle	113°	1	Yes-PSI and 1 st Interval ISI	No	N/A
2RPV-107-121A	Outlet Nozzle	158°	1	Yes-PSI and 1 st Interval ISI	No	N/A
2RPV-107-121D	Outlet Nozzle	202°	1	Yes-PSI and 1 st Interval ISI	No	N/A
2RPV-105-121D	Inlet Nozzle	247°	1	Yes-PSI and 1 st Interval ISI	No	N/A
2RPV-105-121C	Inlet Nozzle	293°	1	Yes-PSI and 1 st Interval ISI	No	N/A
2RPV-107-121C	Outlet Nozzle	338°	1	Yes-PSI and 1 st Interval ISI	No	N/A

Footnote 1: Coverage of the examination volume from the vessel shell side as shown in ASME Section XI, Figure IWB-2500-7(a) was limited due to the dual sided scanning requirements contained in ASME Section V, Article 4 which was used to examine these welds in the first interval.

Footnote 2: WesDyne International reviewed the fabrication records for these welds including the Combustion Engineering Inspection Report, Westinghouse deviation notices, trip reports, surveillance reports and QC/NDE shop documentation for this reactor pressure vessel. The CNS site records were reviewed also. There is no documented evidence of weld repairs being made to the nozzle-to-shell welds.