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DUKE POWER COMPANY
POWER BUILDING
422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

TELEPHONE: AREA 704
373-4083

May 4, 1981

Mr. James P. O'Reilly, Director
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Re: RII: WPK
50-413/81-05
50-414/81-05

Dear Mr. O'Reilly:

Please find attached a response to Infraction Nos. 413-414/81-05-01 and 81-05-02 as identified in the above referenced Inspection Report. Duke Power Company does not consider any information contained in this inspection report to be proprietary.

I declare under penalty of perjury, that the statements setforth herein are true and correct to the best of my knowledge.

Very truly yours,

William O. Parker, Jr. By [illegible]

William O. Parker, Jr.

RWO:djs
Attachment

cc: NRC Resident Inspector
Catawba Nuclear Station

DUKE POWER COMPANY

CATAWBA NUCLEAR STATION

NOTICE OF VIOLATION

Duke Power Company
Catawba 1 and 2

Docket Nos. 50-413 & 50-414
License Nos. CPPR-116 & CPPR-117

As a result of the inspection conducted on March 17-20, 1981, and in accordance with the Interim Enforcement Policy, 45 FR 66754 (October 7, 1980), the following violations were identified.

A. 10 CFR 50, Appendix B, Criterion IX as implemented by Duke Power Company (DPC) Topical Report "DUKE 1-A" Section 17, Paragraph 17.1.9 requires measures be established to assure that special processes, including welding are controlled. Duke's welding program is controlled by QAPP L-100, "Welding Program". ASME B and PV Code Section IX with Interpretation IX-78-92 of September 25, 1978, has been identified as the applicable code for welder qualification. Interpretation IX-78-92 limits the welder qualification thickness range qualified to 1½ inch maximum for combination process welder qualification tests administered on 3/4 inch pipe test assemblies. QAPP M-4, "Visual Inspection and NDE of Welds (ASME III)" controls preweld visual inspection of repair welds. CNS-1121.001-1 "Specification for Field Fabrication of Structural Steel Construction for Nuclear Safety Related Structures", has been identified as the applicable fabrication specification for the fabrication of the containment spray system heat exchanger supports.

Contrary to the above, on March 17-19, 1981, adequate measures were not established to assure that special processes including welding were controlled in that the following examples were noted:

1. The traveler for Weld No. 2NV-6[illegible]-20 which has a "J" bevel weld preparation authorized the use of a welding procedure (L-234), which is applicable to a "V" bevel weld preparation only.

2. Performance Qualification Field Weld Data Sheet L-180, a combination process test administered on a 3/4" wall thickness groove pipe test assembly, incorrectly states that the tested welder is qualified for unlimited thickness.

3. Welding inspectors are performing preweld visual inspection of repair cavities to QAPP M-4 which does not have defined acceptance criteria.

4. Welding inspectors are making the determination of whether to back purge repair welds to QAPP M-4 which does not have defined acceptance criteria.

5. Drawing CN-1220-43 Revision 10 for the containment spray system heat exchanger support specifies CNS-1120-00-1, "230 KV Switching Station Low Structures -- Structural Steel" as the applicable fabrication specification.

B. 10 CFR 50, Appendix B, Criterion V as implemented by Duke Power Company (DPC) Topical Report "DUKE 1-A" Section 17, paragraph 17.1.5 requires activities affecting quality be accomplished in accordance with documented procedures. Process Specification L-300, "Shielded Metal Arc Welding", Revision 10, paragraph 9.2 limits the maximum bead width to 3/4 inch maximum for non-cover fill beads deposited with 1/8 inch diameter electrodes.

Contrary to the above, on March 17, 1981, activities affecting quality were not accomplished in accordance with documented procedures in that the welder of record for safety injection system weld joint no. 2-NI-15-1 (Repair) deposited 1 1/8 inch wide, non-cover, fill, beads for 25% of the circumference of the joint with a 1/8 inch diameter electrode.

DUKE POWER COMPANY

CATAWBA NUCLEAR STATION

Response:

Part A, Item 1. The reference to welding procedure (L-234) is incorrect and should read (L-232). It is true L-232 only referenced a V-bevel joint. However, the weld traveler (M-4A) was a preapproved form and listed several other choices for the craft. When issuing the travelers to the field, it is impossible to know which bevels will be encountered in the field at fitup. Thus, listing several possibilities provides the craft with sufficient acceptable joint details to match the piping material provided for that joint. This welding procedure (Field Weld Data Sheet L-232) has been submitted for revision to provide additional acceptable bevels (including a J-bevel). This revision should be completed by May 25, 1981.

Item 2. Performance Qualification L-180 was originated prior to Code Interpretation IX-78-92 being stated. At the time of origination, this qualification was acceptable per ASME Section IX 1974 through Winter 1975 Addenda. As this interpretation does not agree with the limits of ranges shown on L-180, a revision to L-180 has been originated to correct the qualified ranges of weldable thicknesses. This revision will be completed by May 25, 1981. This performance qualification has not been referenced on any field weld data sheets, thus no problems have occurred in actual field welding and the revision solely constitutes a paperwork change.

Item 3. Catawba does not feel it is practical or necessary to have defined acceptance criteria for repair cavities. Defining criteria for acceptance would be dependent upon many variables including joint position, depth of cavity, etc. If definite criteria were established, their general, all encompassing nature would not be meaningful. It is our contention that the welder will prepare the cavity to such a geometry as to allow for an acceptable repair without leaving lack of fusion in the weld repair metal. Our compliance with NX-4453.1 assures us an acceptable repair cavity geometry. Also, the welding inspector assures an acceptable cavity after the NDE inspector performs his MT or PT per NX-4453.1. Catawba does not intend on taking any corrective action on this item.

Item 4. Catawba feels our present program is sufficient in regards to purging weld repairs. The necessity to purge a weld repair is determined by the welding supervision and QC inspector. Any repair cavity of sufficient depth to raise a question as to possibility of oxidation occurring is purged. The inspection hold point for purge is marked not applicable only when the welding inspector, clearly determines purging is not necessary. Catawba feels our current program is adequate in this area and intends to take no further correction action.

Item 5. A Variation Notice was generated by Construction to reference all welding on Drawing CN-1220-43 to be done per Specification CNS 1121.00-1 (the proper specification for AWS welding). Construction is not aware of any other Design drawings containing erroneous specifications for welding. As work will continue with the variation notice, Construction will take no further action on this item.

Part B, Item 1.A Nonconforming Item Report was generated and resolved concerning this item. Training of the responsible welder has been performed and documented. Random inspections of welding technique are performed by the welding inspector to assure compliance with the process specifications. Violations of weld technique found during random or required inspections will be identified by the inspector so that corrective action can be taken. Catawba plans no further action on this item as the nonconforming item has been completed.