



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

Report Nos.: 50-413/84-73 and 50-414/84-32

Licensee: Duke Power Company
422 South Church Street
Charlotte, NC 28242

Docket Nos.: 50-413 and 50-414

License Nos.: CPPR-116 and CPPR-117

Facility Name: Catawba 1 and 2

Inspection Dates: June 19-20 and 28, 1984

Inspection at Catawba site near Rock Hill, South Carolina

Inspector: *N. Economos* 7/9/84
N. Economos Date Signed

Accompanying Personnel: C. Czajkowski, Metallurgical Engineer
Brookhaven National Laboratory (June 20, 1984)

Approved by: *J. J. Blake* 7/10/84
J. J. Blake, Section Chief Date Signed
Engineering Branch
Division of Reactor Safety

SUMMARY

Areas Inspected

This special announced inspection involved 17 inspector-hours on site for the purpose of reviewing the licensee's planned corrective actions in response to worker concerns on socket weld fabrication and unauthorized removal of arc strikes identified as unresolved items 413/84-31-01 and 413/84-31-02 respectively.

Results

No violations or deviations were identified.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *T. B. Bright, Construction Engineering Manager
- *R. Hollins, Construction Services Manager
- *D. H. Llewellyn, Associate Field Engineer
- *B. Kruse, Assistant Field Engineer
- S. Ferdon, Metallurgical Assistant Engineer
- J. Kinard, Construction Engineering Technician

Other licensee employees contacted included office personnel.

*Attended exit interview.

2. Exit Interview

The inspection scope and findings were summarized on June 28, 1984, with those persons indicated in paragraph 1 above.

3. Licensee Action on Previous Inspection Findings

(Closed) Unresolved Item 413/84-28-02 Air Handler Structural Integrity

The inspector reviewed DPC's nonconforming item 18144 which was written to document the presence of an unauthorized 1 1/4" diameter hole in Unit 1 air handling unit #1-CRA-AHU-1. The angle steel beam with the hole was evaluated by design engineering and it was concluded that, (1) the hole was made with a torch probably during construction, (2) the hole does not weaken the structure sufficiently to cause failure, (3) the incident was an isolated case, (4) Drawing #CNM-1211.00-634-002 was revised as part of the analysis/evaluation of this item (5) a stainless steel tag referencing the aforementioned NCI has been attached to the component for future reference.

(Open) Unresolved Item 413/84-31-01, 414/84-17-01 Fabrication of Socket Welds

The inspector accompanied by Mr. C. Czajkowski discussed the licensee's program for examining socket welds that were allegedly fabricated without appropriate interpass temperature control. Also, the inspector reviewed the procedures for polishing, etching and evaluating the test results. The inspector observed the etch test performed on the following welds:

<u>Weld</u>	<u>Size</u>	<u>Dwg #</u>
1BB 130-18	2" Ø sch. 160	CN-1BB-130
1BB 130-19	2" Ø sch. 160	CN-1BB-130
1BB 97-18	2" Ø sch. 160	CN-1BB-97

The welds were tested in accordance with ASTM recommended practice A262-70, Detecting Susceptibility to Intergranular Attack in Stainless Steels. Specifically, a small surface area of the base metal which included the heat affected zone near the weld was polished and etched electrolytically with a 10% oxalic acid solution. A replica of the etched surface was taken and checked, with the aid of a metallograph, for sensitization. Each of the three samples checked exhibited a structure which was within the acceptance limits of the aforementioned standard. The licensee indicated that they will examine 23 joints out of 360 socket welds in the six piping systems designated by Design Engineering as critical. The licensee's position is that this population will provide them with a 99% confidence level. In addition, the licensee stated that of the six welds fabricated by welder "B" in the critical pipe lines, only four are accessible and these will be examined in the same manner. These four socket welds are in addition to the 23 joints discussed above. For the three examined socket welds, the inspector reviewed weld process control records and material quality records to verify specification and code requirements. This item will remain open pending review of the licensee's final report on this item.

(Open) Unresolved Item 413/84-31-02, 414/84-17-02 Unauthorized Removal of Arc Strikes

The inspector discussed this matter with the licensee and received an update of the on-going investigation. The licensee has conducted interviews with craft and line supervision, has reviewed quality records and vendor reports/documents. In addition, the licensee plans to perform a visual inspection of valves within the designated critical pipe line boundary, discussed in the previous item, to determine the extent of this condition. This item will remain open pending a review of the licensee's findings.