

RELATED CORRESPONDENCE

DOCKETED  
USNRC

June 5, 1984

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James L. Kelley, Chairman  
Administrative Judge  
Atomic Safety and Licensing Board  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Dr. Paul W. Purdom  
Administrative Judge  
235 Columbia Drive  
Decatur, GA 30030

Dr. Richard F. Foster  
Administrative Judge  
P.O. Box 4263  
Sunriver, Oregon 97702

In the Matter of  
DUKE POWER COMPANY, ET AL.  
(Catawba Nuclear Station, Units 1 and 2)  
Docket Nos. 50-413 and 50-414

Dear Administrative Judges:

Consistent with my letter to the Licensing Board of February 29, 1984, I am forwarding to you correspondence relating to an inspection report and notice of violation recently issued by Region II in the area of quality assurance at Catawba Nuclear Station.

Sincerely,

George E. Johnson  
Counsel for NRC Staff

Enclosures: As stated

cc w/enclosures: Service list

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OFC	: OELD <i>jm</i>	: OELD <i>gr</i>	:	:	:	:	:
NAME	: GJohnson/rb	: JGray	:	:	:	:	:
DATE	: 6/4/84	: 6/4/84	:	:	:	:	:

*yellow*

MAY 22 1984

Duke Power Company  
ATTN: Mr. H. B. Tucker, Vice President  
Nuclear Production Department  
422 South Church Street  
Charlotte, NC 28242

Gentlemen:

SUBJECT: REPORT NOS. 50-413/84-28 AND 50-414/84-16

Thank you for your responses of April 19, 1984 and May 3, 1984, to our Notice of Violation issued on March 23, 1984, concerning activities conducted at your Catawba facility. We have evaluated your responses and found that they meet the requirements of 10 CFR 2.201. We will examine the implementation of your corrective actions during future inspections.

We appreciate your cooperation in this matter.

Sincerely,

*(S)*

Richard C. Lewis, Director  
Division of Reactor Projects

cc: R. L. Dick, Vice President - Construction  
J. W. Hampton, Station Manager

bcc: NRC Resident Inspector  
G. Johnson, ELD  
Document Control Desk  
State of South Carolina

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G PDR

**DUKE POWER COMPANY**

P.O. BOX 33189  
CHARLOTTE, N.C. 28242

HAL B. TUCKER  
VICE PRESIDENT  
NUCLEAR PRODUCTION

TELEPHONE  
(704) 373-4531

May 3, 1984

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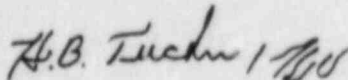
Mr. James P. O'Reilly, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30303

Re: RII: WPK  
50-413/84-28  
50-414/84-16

Dear Mr. O'Reilly:

Please find attached a response to Violation No. 413/84-28-01, 414/84-16-01, as identified in the above referenced inspection report. Duke Power Company does not consider any information contained in this inspection report to be proprietary.

Very truly yours,



Hal B. Tucker

LTP/php

Attachment

cc: NRC Resident Inspector  
Catawba Nuclear Station

Mr. Robert Guild, Esq.  
Attorney-at-Law  
P. O. Box 12097  
Charleston, South Carolina 29412

Palmetto Alliance  
2135 1/2 Devine Street  
Columbia, South Carolina 29205

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A. Duke Power Company admits the Violation.

B(1) Cause of Violation, Part 1

Duke Power failed to amend Specification CNS-1211.00-00-0010. The requirement for review of welder qualification certification is a part of Duke's QA program of vendor approval, audit and surveillance. As such, Duke did not require submission of welder certifications to Duke. Due to oversight, the requirement was not removed from the Design specification.

C(1) Action

Specification CNS 1211.00-00-0010 has been revised to delete the requirement for welder certification submittal to Duke. Welder certifications have been obtained from the vendor and added to the QA documentation package.

D(1) Corrective Action

All other procurement specifications to Bahnson have been reviewed to assure no similar deficiencies existed.

E(1) Status

Full compliance has been achieved.

B(2) Cause of Violation, Part 2

The cause of welding deficiencies on these Bahnson air handling units was poor workmanship and weld inspection by Bahnson in violation of Bahnson's QA program. These deficiencies were not identified by Duke Power prior to installation of the equipment.

C(2) Action

A complete inspection of Bahnson's air handling units was conducted by Bahnson's Level III during the week of 2/27/84. Duke Power Company documented all welding deficiencies on NCIR #18132. These deficiencies were evaluated by Bahnson, Bahnson's seismic consultant, and Duke Power Design Engineering. All reports, analyses, and results of inspections are documented in NCIR #18132. Similar Bahnson units at other Duke locations were also inspected.

D(2) Corrective Action

No other orders for similar Bahnson equipment are in process; therefore, no specific corrective action for Bahnson AHU's is required. To assure that similar problems do not occur in other areas of Bahnson work, Duke QA has conducted audits and surveillances of Bahnson's QA program, with special emphasis on welding.

E(2) Status

All deficient welds have been inspected and results analyzed. All welds were structurally adequate and have been accepted by engineering "as is" with no repair. All documentation will be on file with completed NCI. Files should be completed by May 20, 1984.

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MAY 4 1984

Duke Power Company  
ATTN: Mr. H. B. Tucker, Vice President  
Nuclear Production Department  
422 South Church Street  
Charlotte, NC 28242

Gentlemen:

SUBJECT: REPORT NOS. 50-413/84-28 AND 50-414/84-16

Thank you for your response of April 19, 1984, to our Notice of Violation issued on March 23, 1984, concerning activities conducted under NRC Construction Permit Nos. CPPR-116 and CPPR-117. It is our understanding that you will supplement your response by May 3, 1984.

We appreciate your cooperation in this matter.

Sincerely,

H Dance for -

Richard C. Lewis, Director  
Division of Reactor Projects

cc: R. L. Dick, Vice President  
Construction  
J. W. Hampton, Station Manager

bcc: NRC Resident Inspector  
G. Johnson, ELD  
Document Control Desk  
State of South Carolina

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DUKE POWER COMPANY  
P.O. BOX 33189  
CHARLOTTE, N.C. 28242

HAL B. TUCKER  
VICE PRESIDENT  
NUCLEAR PRODUCTION

TELEPHONE  
(704) 373-4531

April 19, 1984

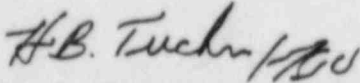
Mr. James P. O'Reilly, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30303

Re: RII:PKV/PHS  
50-413/84-28  
50-414/84-16

Dear Mr. O'Reilly:

We are currently awaiting the results of analyses requested of our supplier, The Bahnson Company, to incorporate into our response to Violation No. 413/84-28-01; 414/84-16-01. Our full response will be forthcoming no later than May 3, 1984.

Very truly yours,



Hal B. Tucker

LTP/php

cc: NRC Resident Inspector  
Catawba Nuclear Station

Mr. Robert Guild, Esq.  
Attorney-at-Law  
P. O. Box 12097  
Charleston, South Carolina 29412

Palmetto Alliance  
2135 1/2 Devine Street  
Columbia, South Carolina 29205

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MAR 23 1984

Duke Power Company  
ATTN: Mr. H. B. Tucker, Vice President  
Nuclear Production Department  
422 South Church Street  
Charlotte, NC 28242

Gentlemen:

SUBJECT: REPORT NOS. 50-413/84-28 AND 50-414/84-16

On March 7 - 8, 1984, NRC inspected activities authorized by NRC Construction Permit Nos. CPPR-116 and CPPR-117 for your Catawba facility. At the conclusion of the inspection, the findings were discussed with those members of your staff identified in the enclosed inspection report.

Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observation of activities in progress.

The inspection findings indicate that certain activities violated NRC requirements. The violations, references to pertinent requirements, and elements to be included in your response are presented in the enclosed Notice of Violation.

Your attention is invited to unresolved items identified in the inspection report. These matters will be pursued during future inspections.

In accordance with 10 CFR 2.790(a), a copy of this letter, its enclosures, and your reply will be placed in NRC's Public Document Room upon completion of our evaluation of the reply. If you wish to withhold information contained therein, please notify this office by telephone and include a written application to withhold information in your response. Such application must be consistent with the requirements of 2.790(b)(1).

The responses directed by this letter and the enclosures are not subject to the clearance procedures of the Office of Management and Budget issued under the Paperwork Reduction Act of 1980, PL 96-511.

Should you have any questions concerning this letter, please contact us.

Sincerely,

Richard C. Lewis, Director  
Division of Project and  
Resident Programs

Enclosures: (See page 2)

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MAR 23 1984

Duke Power Company

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Enclosures:

1. Notice of Violation
2. Inspection Report Nos. 50-413/84-28  
and 50-414/84-16

cc w/encls:

R. L. Dick, Vice President - Construction  
J. W. Hampton, Station Manager

bcc w/encls:

Document Control Desk  
State of South Carolina  
NRC Resident Inspector

ENCLOSURE 1

NOTICE OF VIOLATION

Duke Power Company  
Catawba

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

The following violation was identified during an inspection conducted on March 7 - 8, 1984. The Severity Level was assigned in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C).

10 CFR 50, Appendix B, Criterion VII as implemented by Duke Power Company (DPC) Topical Report "Duke 1-A", Section 17, Paragraph 17.1.7, requires measures be established to assure that purchased equipment conforms to procurement documents. DPC Specification CNS-1211.00-00-0010, "Control Room Area Engineered Safeguards Large Capacity Air Handling Units," Revision 9, Paragraph 10.4.d requires welder qualification certificates to be submitted with the shipment of the equipment. DPC specification CNS-1211.00-00-0010 and Purchase Order E-2157-21 requires the control room area air handling units to be fabricated in accordance with AWS D1.1-77, and The Bahnson Quality Program. The Bahnson Quality Program required that the control room area air handling units be examined for missing welds, welds with overlap undersize welds and undercut.

Contrary to the above, adequate measures were not established to assure that purchased equipment conformed to procurement documents, in that the following examples were noted relative to the accepted and installed control room area air handling units, Tag Nos. 1-CRA-AHU-1 and 2-CRA-AHU-1:

1. Welder qualification certificates were not submitted by the manufacturer. This fact was not identified by the licensee.
2. Numerous examples of missing welds, welds with overlap, undersized welds, and undercut were noted by the inspector and not identified by the licensee prior to installation.

This is a Severity Level IV violation (Supplement II).

Pursuant to 10 CFR 2.201, you are required to submit to this office within 30 days of the date of this Notice, a written statement or explanation in reply, including: (1) admission or denial of the alleged violations; (2) the reasons for the violations if admitted; (3) the corrective steps which have been taken and the results achieved; (4) corrective steps which will be taken to avoid further violations; and (5) the date when full compliance will be achieved. Consideration may be given to extending your response time for good cause shown. Security or safeguards information should be submitted as an enclosure to facilitate withholding it from public disclosure as required by 10 CFR 2.790(d) or 10 CFR 73.21.

Date: MAR 23 1984

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

Report Nos.: 50-413/84-28 and 50-414/84-16

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 at Catawba site near Rock Hill, South Carolina

Inspector: *W. P. Kleinsorge*  
 W. P. Kleinsorge

March 16, 1984  
 Date Signed

Approved by: *J. J. Blake*  
 J. J. Blake, Chief  
 Engineering Program Branch  
 Division of Engineering and Operational Programs

3/16/84  
 Date Signed

SUMMARY

Inspection on March 7-8, 1984

Areas Inspected

This special, announced inspection involved 15 inspector-hours on site in the areas of licensee actions on previous enforcement matters, and heating ventilating and air conditioning (HVAC).

Results

Of the two areas inspected, no violations or deviations were identified in one area; one apparent violation was found in one area (Violation - "Failure to Establish Adequate Procurement Controls" - paragraphs 5b(1) and 5d). No deviations were found.

## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*R. L. Dick, Vice President, Construction
- \*T. B. Bright, Construction Engineering Manager
- \*W. O. Henry, QA Manager Tech. Services
- \*J. W. Baggett, QA - Vendors
- \*P. White, Design Engineering
- \*J. C. Shropshire, QA
- \*T. H. Propst, Construction Technician
- \*D. P. Hensley, QC Technician

Other licensee employees contacted included construction craftsmen, technicians, and office personnel.

#### NRC Resident Inspectors

- \*P. K. VanDoorn
- P. H. Skinner

\*Attended the exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on March 8, 1984, with those persons indicated in paragraph 1 above. The inspector described the areas inspected and discussed in detail the inspection findings listed below. No dissenting comments were received from the licensee.

(Open) Violation 50-413/84-28-01, 414/84-16-01: "Failure to Establish Adequate Procurement Controls" - paragraphs 5b(1) and 5d.

(Open) Unresolved Item 50-413/84-28-02: "Air Handler Structural Integrity" - paragraph 5b(2).

(Open) Unresolved Item 50-413/84-28-03, 414/84-16-03: "Filter Frame Rivets" - paragraph 5c.

### 3. Licensee Action on Previous Enforcement Matters

(Closed) Unresolved Item 413/82-15-02 and 414/83-12-02: "Column Bearing" This item concerns reduced column bearing due to welding operations. The inspector discussed the above with the licensee, who demonstrated to the satisfaction of the inspector that the reduced bearing area resulted from welding. The licensee provided calculations to demonstrate that the reduced bearing area was consistent with the original design parameters. The inspector had no further questions. This matter is considered closed.

#### 4. Unresolved Items

Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve violations or deviations. New unresolved items identified during this inspection are discussed in paragraphs 5b(2) and 5c.

#### 5. Heating, Ventilating and Air Conditioning (HVAC)

The purpose of this special inspection was to follow-up on deficiencies noted during a NRC vendor inspection of the Bahnson Company (inspection report number 99900791/82-01), a heating, ventilation, and air conditioning (HVAC) component supplier, and the Harris Site (NRC Region II Report No. 50-400/84-05). The inspector performed detailed inspections of safety-related HVAC air handling units manufactured by the Bahnson Company. The inspections as indicated below, were conducted using criteria established in the applicable Duke Specification, Duke Procedures, Seismic Qualification Reports, and Bahnson drawings, procedures specifications and regulatory requirements. The applicable code for the fabrication of the units examined is AWS D1.1-77. ASME Section IX was identified as the applicable code for welder and welding procedure qualification.

##### a. Unit Identification

There are two nuclear safety-related air handling units installed at the Catawba Site manufactured by the Bahnson Company at their Winston-Salem Plant. There are no non nuclear safety-related units. The units, Tag Nos. 1-CRA-AHU-1 and 2-CRA-AHU-1 are the "Control Room Area Engineering Safeguards Large Capacity Air Handling Units." These units are installed and have been turned over to steam production.

##### b. Visual Inspection (Welding)

The inspectors made a visual examination of selected welds on the above accepted and installed units relative to the following: location, length, size and shape; weld surface finish and appearance; transitions between different wall thicknesses; weld reinforcement -- height and appearance; joint configuration of permanent attachments and structural supports; removal of temporary attachments; arc strikes and weld spatter; finish grinding or machining of weld surface -- surface finish and absence of wall thinning; surface defects -- cracks, laps, and lack of penetration, lack of fusion, porosity, slag, oxide film and undercut exceeding prescribed limits.

- (1) With regard to the above inspection the inspector noted numerous examples of missing welds, welds with overlap, undersized welds, and undercut. This is contrary to, DPC Specification CNS-1211.00-00-0010, "Control Room Area Engineered Safeguards Large Capacity Air Handling Units," Revision 9, which requires the

control room area air handling units to be fabricated in accordance with AWS D1.1-77 and the Bahnson Quality Program. The Bahnson Quality Program required that the control room area air handling units be examined for missing welds, welds with overlap, undersize welds, and undercut.

Therefore, equipment was inspected, accepted and installed without detecting the fact that material did not conform to specification requirements.

This is an example of Violation 413/84-28-01 and 414/84-16-01 discussed further in paragraph 5d.

- (2) With regard to the inspection above the inspector noted a flame cut hole in roof support angle beam of the Unit 1 air handler. At the time of this inspection, it could not be determined whether the above condition denigrated the structural integrity below design limits. The licensee indicated that they would evaluate the above condition. The inspector stated, pending NRC review of the licensee's evaluation the above matter would be identified as unresolved item 413/84-28-02: "Air Handler Structural Integrity."

c. Visual Examination (Bolting)

The inspector made a visual examination of selected connections for appropriate fastener material type, size, material and traceability.

With regard to the inspection above the inspector noted the following:

- The location of filter frame rivets, in some cases, were different than shown on Bahnson Drawing 2682-18-4 (four on each vertical side and three on each horizontal side).
- One missing filter frame rivet
- Numerous rivets installed without washers
- The bill of materials on all drawings examined only listed 3/16-inch diameter rivets. The Seismic Qualification Report for the units in question assumed 1/4-inch diameter stainless steel mandrel G-51 rivets in the filter frame. At the time of this inspection it could not be determined whether the installed rivets were 3/16-inch or 1/4-inch diameter..

The inspector discussed the above with the licensee who indicated they would determine the significance of the missing rivet and missing washers, and determine the actual size and of the installed rivets. The inspector stated that pending NRC review of the licensee's evaluation this matter will be identified as unresolved item 413/84-28-03, 414/84-16-03: "Filter Frame Rivets."

d. Review of Quality Records

The inspector reviewed the document packages for the two control room area air handling units to determine conformance with procurement, storage, and fabrication specifications, and regulatory requirements. The following Documents were examined:

Documents Reviewed

DPC-Specification No. CNS-1211.00-10, Revision 9, "Control Room Area Engineered Safeguards Large Capacity Air Handling Units"

DPC Purchase Order No. 2157

DPC Letter of April 9, 1979

DPC Vendor Surveillance Reports dtd.  
 December 11, 1978  
 May 18, 1979  
 February 21, 1980

⊙PC-Receiving Inspection Report

Bahnsen Drawings	2682-18-1 Rev. 1
	2682-18-2 Rev. 2
	2682-18-3 Rev. 3
	2682-18-4 Rev. 3
	2682-18-5 Rev. 4
	2682-18-6 Rev. 1
	2682-18-7 Rev. 2
	2682-18-8 Rev. 2
	2682-18-9 Rev. 2
	2682-18-10 Rev. 4

With regard to the above inspection the inspector determined that the licensee had accepted and installed the control room area air handling units and the associated documentation packages without Welder Qualification Certificates.

The above is contrary to, DPC Specification CNS-1211.00-00-0010, "Control Room Area Engineered Safeguards large capacity air handling units," Revision 9, paragraph 10.4.d which requires welder qualification certificates to be submitted with the shipment of the equipment.

The above failure of receiving inspection document review to identify a violation of specification requirements combined with the example of acceptance of nonconforming equipment discussed in paragraph 5b(1) indicates that the licensee had not established adequate measures to assure purchased equipment conformed to procurement documents. Failure to establish adequate controls for the purchase of material is in violation of 10 CFR 50, Appedix B Criteria VII. This violation will be

identified as 413/84-28-01, 414/84-16-01: "Failure To Establish Adequate Procurement Controls."

Within the areas examined no violations or deviations were identified except as noted in paragraphs 5b(1) and 5d.