

U. S. NUCLEAR REGULATORY COMMISSION  
REGION I

Report Nos. 50-317/91-29  
50-318/91-29

Docket Nos. 50-317  
50-318

License Nos. DPP-53  
DPK-69

Licensee: Baltimore Gas and Electric Company

Facility Name: Northwest CF/DCs, Units 1 and 2

Inspection At: Lansby, Maryland

Inspection Conducted: November 18-21, 1991

Inspector: E. H. Gray for HJK 1/27/92  
Herbert J. Kaplan, Sr. Reactor Engineer,  
Materials Section, EB, DRS date

Approved by: E. H. Gray 1/27/92  
Edwin H. Gray, Chief, Materials Section,  
Engineering Branch, DRS date

Inspection Summary:

Areas Inspected: The inspector reviewed seven open items and two unresolved items covering welding and NDE. These items included several violations and one deviation.

Results: On the basis of the evidence furnished by the licensee, the inspector closed six open items and two unresolved items applicable to Units 1 and 2. One open item 317/90-01-02 and 318/90-01-02 remains open pending NRC verification of the visual inspector's competency.

## 1.0 Scope

The purpose of this inspection was to review the response and corrective actions regarding two unresolved items and seven open items in the welding and nondestructive examination area generated during the period between 1989 and 1990. Persons contacted during this inspection are listed in Attachment 1.

## 2.0 Open items

### 2.1 (Closed) Violation (317/89-15-03, 318/89-16-03)

A sketch posted adjacent to a weld rod oven incorrectly depicted the location of weld rods available in the oven.

Response and Corrective Action - The sketches were found to be unnecessary and potentially confusing, and have been discarded. BG&E stated that the sketches were not used to ensure proper rod issuance or traceability verification. During this inspection, the inspector checked a weld oven in the licensee's weld laboratory used for welder qualification and found electrodes to be properly segregated in various compartments as required by Calvert Cliffs Instruction 226. This item is closed.

### 2.2 (Closed) Violation 317/89-15-04, 318/89-16-04

A temperature gauge in a weld rod oven was found to be 220° F. The specified range was 225-350° F.

Response and Corrective Action - The gauge was found to be of low quality with an accuracy range of  $\pm 10^\circ$  F. Post testing actually showed the gauge to be reading 15° F lower than the actual temperature, and that the temperature in the oven was actually 235° F, within specification. The defective gauge was replaced, and the periodicity of oven calibration checks as specified in CCI-226 was increased to a quarterly basis. This item is closed.

### 2.3 (Closed) Violation (317/89-15-05, 318/89-16-05)

Several welding procedures were found to lack Plant Operation and Safety Review Committee (POSRC) approvals.

Response and Corrective Actions - The subject procedures were subsequently reviewed by POSRC. Several procedures, namely WPP-CC-6.001, WPP-CC-6.002 and QAP-6 were checked and found to have POSRC approval. This item is closed.

2.4 (Closed) Deviation (317/89-21-03, 318/89-21-003)

Failure of ISI program regarding certification of personnel to conform to the requirements of ANSI N45.2.6, 1978.

Corrective Action - Except for visual inspectors (see Item 2.7) The BG&E's NDE program conforms to N45.2.6. This item is closed.

BG&E stated they would reference N45.2.6 in NDE Procedure CP 5.02. BG&E also stated that only inspectors qualified to ANSI N45.2.6 standards are permitted to work at Calvert.

2.5 (Closed) Violation (317/90-01-01, 318/90-01-01)

Failure to document rejectable indications in a nonconformance report. Also thirteen radiographic density readings were found to be outside the specified range.

Response and Corrective Actions - Rejectable conditions were documented through other mechanisms such as Maintenance Requestor (MR). Presently, rejectable indications are tracked in accordance with a new procedure CC1-169, "Issue Report Initiation, Review and Processing". To preclude radiographic deficiencies, a second party review by a Level II or Level III radiographer was initiated on April 13, 1990. Both of these actions were confirmed by the inspector. This item is closed.

2.6 (Closed) Violation (317/90-01-03, 318/90-01-03)

Failure to mark the center line of Section XI welds.

Response and Corrective Action - Procedure CP-5.041, Reference Marking of Welds, was initiated on July 27, 1990. Also a memorandum requiring centerline markings was issued to all NDE examiners on April 24, 1990. This item is closed.

2.7 (Open) Violation (317/90-01-02, 318/90-01-02)

Failure to comply with ANSI N45.2.6 with regard to experience (3 years) for Level II visual inspectors. The licensee's program requires 3 months in addition to training.

Response - As permitted by the standard, other factors may provide reasonable assurance that a visual inspector can competently perform a particular task. The licensee currently utilizes a formal 40 hr. EPRI training program to

qualify inspectors. The training program is comprehensive and covers the inspection of twelve distinct items such as welds, bolts, valves, pump, supports and snubbers. This item remains open until the NRC is able to verify the competency of visual inspectors during future inspections.

### 3.0 Unresolved Items

3.1 (Closed) (317/89-200-008, 318/89-200-008) - This item is related to items in paragraphs 2.1, 2.2 and 2.3. This item is closed.

3.2 (Closed) (317/90-01-04, 318/90-01-04) - Failure to mark starting points for erosion/corrosion (E/C) inspection programs.

Response and corrective action - Issued procedure ME-AIP 5.05 which requires marking of starting points for E/C program. This item is closed.

### 4.0 Failed Weld Examination

A type 316 stainless steel socket weld failed in the Unit 2 chemical volume and control system (CVC-1076). The weld was located in a 3/4 inch diameter pressure transmitter line. The inspector visually examined the failure which occurred at the toe of the weld. The inspector concurred with BG&E's metallurgist's assessment that the failure was most likely due to vibratory fatigue since the failed end showed no evidence of deformation. The inspector discussed the failure with engineering. The line was repaired by adding an additional run of tubing and eliminating one restraint to provide more flexibility. The inspector had no further questions regarding this matter at this time.

### 5.0 Exit Meeting

An exit meeting was conducted on November 21, 1991 with the attendees listed in Attachment 1 at which time the findings were presented to the licensee. No violations or deviations were identified.

## ATTACHMENT 1

### Persons Contacted

#### Baltimore Gas and Electric Company:

- \* S. Buxbaum, PE NDE Unit
- \* G. Detter, Director, Nuclear Regulatory Mtrs.
- \* J. Doinne, Mechanical Modifications Engineer
- \* K. Hoffman, PE Nuclear Inspection Services
- \* W. R. McCready, Proc & Support Supervisor
- \* A. Thornton, General Supervisor, Technical Services
- \* W. Whitaker, G.S., Mechanical Maintenance
- \* E. Wilson, Compliance Engineer
- \* J. Wood, Sr. Engineer, Quality Audits

#### U.S. Nuclear Regulatory Commission:

- A. Howe, NRC SRI
- H. Kaplan, NRC, Sr. Reactor Engineer

\* Indicates presence at exit meeting

Note: PE = Principal Engineer  
G.S. = General Supervisor