

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-329/84-14(DE); 50-330/84-14(DE)

Docket No. 50-329; 50-330

License No. CPPR-81; CPPR-82

Licensee: Consumers Power Company  
1945 West Parnall Road  
Jackson, MI 49201

Facility Name: Midland Plants, Units 1 and 2

Inspection At: Midland Site, Midland, MI

Inspection Conducted: May 8-9, 21-22, 1984

Inspectors: *K. D. Ward*  
K. D. Ward

6/1/84  
Date

*D. E. Jones*  
D. E. Jones

6/1/84  
Date

Approved By: *D. H. Danielson*  
D. H. Danielson, Chief *for*  
Materials and Processes Section

6/1/84  
Date

Inspection Summary:

Inspection on May 8-9, 21-22, 1984 (Report 50-329/84-14(DE); 50-330/84-14(DE))

Areas Inspected: Allegation; licensee actions related to an unresolved item; a 10 CFR 50.55(e) item and an IE Bulletin; presentation on review of vendor radiography and interpretation of radiographs. The inspection involved a total of 44 inspector-hours by two NRC inspectors including 4 inspector hours during off shifts.

Results: No items of noncompliance or deviations were identified.

## DETAILS

### 1. Persons Present at Review of Vendor Radiography Presentation May 9, 1984, on Site

D. Quamme, Site Manager, CPCo  
R. Wells, Manager, CPCo  
H. Leonard, General Supervisor, CPCo  
J. Wood, Assistant Supervisor, CPCo  
R. Davis, Engineer, CPCo  
R. Van Den Bosch, NDE & Welding, CPCo  
C. Heluer, Consultant, CPCo  
S. Wenk, Consultant, CPCo  
M. Dietrich, Project Field, QA Engineer, Bechtel  
B. Burgess, Senior Resident Inspector, NRC  
R. Hiland, Resident Inspector, NRC  
K. Ward, Reactor Inspector, NRC  
D. Jones, Reactor Inspector, NRC

#### Other Persons Contacted During Inspection

\*R. Van Den Bosch, NDE & welding, CPCo  
R. Whitaker, Special Projects Engineer, CPCo  
J. Kreple, Construction Engineer, CPCo  
W. Collins, NDE Level III, CPCo

The inspector also contacted and interviewed other licensee and contractor employees.

\*Denotes the individual attending the final exit interview May 22, 1984.

### 2. Licensee Action on Allegations

(Open) Allegations on B31.1 Welds (329/80-27-04; 330/80-28-04): CPCo received four allegations concerning B&W NDE work from an individual previously employed at the Midland Site (Fire 16.0, Serial 98FWA80, dated April 11, 1980). Three of the allegations were closed (Reference NRC Report No. 50-329/80-27; 50-330/80-28 and No. 50-329/81-06; 50-330/81-06). The fourth allegation has not been resolved to date. CPCo management in Jackson, Michigan, reviewed the allegation and hired Teledyne Engineering Services to analyze the as-welded conditions and B&W to review the results for acceptability. This may be resolved in the near future.

### 3. Licensee Action on Unresolved Items

(Closed) Unresolved item (329/80-15-02; 330/80-16-02): No NCR for independent hardness checks of installed steam generator bolts that were above the specified hardness range. The inspector reviewed the NCR #S02383 which addresses this item which is still being worked. This unresolved item is considered closed.

4. Licensee Action on IE Bulletin

(Open) IEP 83-06 (329/83-06-BB; 330/83-06-BB): Nonconforming materials supplied by Tube Line Corporation. CPCo is waiting responses from vendors if Tube Line materials were supplied to site.

5. Licensee Action on 10 CFR 50.55(e) Items

(Open) 50.55(e) Item (329/82-06-EE; 330/82-06-EE): Design of internal auxiliary feedwater header in B&W steam generators. Inspection of operating plant steam generators revealed damage to the internal auxiliary feedwater (AFW) header assembly. This damage consisted of header and attachment bracket distortion, loss of holddown dowel pins and in some cases the AFW nozzle thermal sleeve becoming partially disengaged from the header.

As a result of the damage, CPCo established a team for the purpose of planning, engineering, checking and making the modifications. In addition to CPCo the team included B&W and Bechtel assisting with the design effort and MPR Associates providing third party reviews of the engineering and analysis efforts.

The inspector followed the progress of this modification for several months (Ref. NRC Report No. 50-329/82-16; 50-330/82-16) and CPCo has sent nine interim reports on this item to Region III. The last CPCo interim report dated February 24, 1984 stated that another report, either interim or final, will be issued on or before June 1, 1984.

6. Review of Vendor Radiography Presentation

The purpose of this presentation was to provide the NRC with an informational update on the vendor film review program.

One of the reasons why this program was started was because of the problems that the RIII inspector had found on other sites in the field of radiography a few years ago.

This program was developed in 1981 to provide an overview of the radiography performed at vendor facilities. The sampling was equivalent to MIL-STD-105D, single sampling, general inspection Level III for vendor radiography received prior to December 31, 1978. Radiographs received on or after December 31, 1978, were reviewed 100%. The review was performed by a team of approximately six reviewers for six months full. This team was comprised of individuals from NDE Engineering, Division of Hartford Steam Boiler Inspection and Insurance Company under the direction and guidance of CPCo. Each radiographic inspection facility (RIF) was reviewed separately. Each item of hardware (weld, valve body, valve bonnet etc.) was evaluated separately. Each lot (item of hardware) was given a unique identification number traceable to the RIF, (there were 44 RIF).

Each sample radiograph was reviewed for:

- . Acceptability of Radiographic technique used.
- . Acceptability of quality of radiographic film.
- . Acceptability of hardware material.

The approximate number of radiographic film that was subject to the sampling program was 94,000. The approximate number of film actually sampled was 46,500, this was 8,399 hardware items. From this review the reviewers found 5 items of hardware with material defects and these were repaired and reradiographed and found to be acceptable. Approximately 150 items of hardware were identified as having documentation discrepancies (radiographs and support paperwork). CPCo contracted the services of two nationally recognized experts in radiography to review the deficient film and recommend dispositions. CPCo accepted the recommendations of the radiography experts that the subject radiographic film provides adequate confidence in hardware quality and that no further action is required. The experts stated that all the film met the intent of the Code. The inspector inquired if the ANI knew about this problem and the inspector was informed that the ANI was satisfied that all the film had been accepted. The film was subsequently reviewed by two NRC Region III Radiographic Interpreters and found to be acceptable. The weld quality was found to be exceptionally good. Paperwork discrepancies were noted as involving such items as typographical errors and incomplete or missing reports. The effort on resolving the paperwork discrepancies was approximately 95% complete.

The inspector inquired if corrective action was taken to preclude repetition of similar unsatisfactory conditions in the future. The inspector was informed that there is very little vendor film to come on site and that it would be interpreted 100%.

No items of noncompliance or deviations were identified.

#### 7. Exit Interview

The inspector met with site representatives (denoted in Persons Contacted Paragraph) at the conclusion of the inspection. The inspector summarized the scope and findings of the inspection noted in this report.