U.S. NUCLEAR REGULATORY COMMISSION OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Reports No. 50-329/80-16; 50-330/80-17

Docket Nos. 50-329; 50-330

Licenses No. CPPR-81; CPPR-82

6/5/80

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

Facility Name: Midland Nuclear Power Plant, Units 1 and 2

Inspection At: Midland Site, Midland, MI

Inspection Conducted: April 1-30, 1980

Inspector: R. J. Cook

Approved By: D. W. Hayes, Chief for Engineering Support Section No. 1

Inspection Summary

Inspection on April 1-30, 1980 (Reports No. 50-329/80-16; 50-330/80-17) Areas Inspected: Examination of site conditions; detensioning of reactor vessel hold down bolts; assembly of Unit 1 reactor coolant pumps; investigation into construction activities of the Zack Co., and changes to 10 CFR Part 21 notification assoicated with Ruskin Fire Dampers. This inspection effort involved a total of 147 inspection-hours by one NRC inspector. Results: No items of noncompliance or deviations were identified.

DETAILS

Persons Contacted

Consumers Power Company Personnel

- D. Miller, Site Manager
- T. Cooke, Project Superintendent
- *J. Corley, QA Section Head, IE & TV
- *B. Peck, Construction Supervisor
- D. Keating, QA Group Supervisor
- M. DeWitt, QA Mechanical
- H. Allen, QA Mechanical

Bechtel Power Corporation Personnel

*L. Dreisbach, Project QA Engineer

B & W Personnel

*R. Shope, QC Supervisor

C. Ashworth, QC Engineer

The Zack Company Personnel

M. D'Haem, QC Manager

Numerous other principal staff and personnel were contacted during the reporting period.

*Danotes those present during the exit interview conducted during the reporting period.

Functional or Program Areas Inspected

1. Site Tours

At periodic intervals during the report period, tours of selected areas of the site were performed. These tours were intended to assess the cleanliness of the site; storage conditions of equipment and piping being used in site construction; the potential for fire or other hazards which might have a deleterious effect on personnel and equipment and to witness construction activities in progress. During one of these tours the Resident Inspector examined minor fire damage that had occurred to a small electrical distribution box located at the south end of the 659 foot clevation. The damage occured as a result of heavy rains causing a "short circuit" in the box.

2. Detensioning of Reactor Vessel Hold Down Bolts

During the reporting period the Resident Inspector attended a safety briefing conducted by B & W to explain the safety precautions incorporated into the procedure for detensioning the Unit 1 reactor vessel hold down bolts and to demonstrate the use of the detensioning and personnel protection equipment. The workmen involved demonstrated proficiency in the use of the equipment on a fabricated mock-up and the Unit 2 hold down bolts were used for prototype testing and training. The Resident Inspector witnessed the control and set-up for detensioning of Unit 1 hold down bolts which commenced during the report period. No obvious discrepencies were noted.

The assessable remains of bolt No. 35 in the outer ring was removed and shipped to Teledyne Engineering Services for similar metallurgical evaluations to those performed on the previous two bolts which were discovered failed. Bolt No. 35 was discovered failed during an NRC inspection on February 5, 1980. The results of this evaluation were not available during this report period.

3. Assembly of Unit No. 1 Reactor Coolant Pumps

During the reporting period, the licensee continued assembly of the Unit 1 coolant pumps. An inspection of the casing sealing surface conducted by B & W on pumps designated 1P51A and 1P51D revealed areas of raised and upset metal on the gasket sealing surface. Repairs of these surfaces were being undertaken by the pump supplier. The shallow areas were filled with weld filler material, machined with a portable mill and finished ground smooth. The raised portions were machined and finished ground.

Consumers Power Co. had responsibility for Quality Control on these repairs. The Resident Inspector witnessed portions of this repair and subsequent QC activities.

The Resident Inspector examined an area on the 1P51A pump which appeared to have been the result of a prior weld repair. The area was approximately 3/16 inch wide by 5/8 inch wide. The geometry of the area was documented on B & W Report of Nonconformity No. 1685.

As a result of the repair, work performed on the sealing surface for pump 1P51D, a liquid penetrant examination (PT) was performed on the entire sealing surface. No rejectable defects were noted. However, four separate minor indications were noted in areas where weld repairs had not been performed during the present casing repair evalutions. Closer examination of these areas revealed metal discolorations which could be associated with a weld repair.

During the exit interview the Resident Inspector inquired as to whether any documentation existed on site pertaining to those areas on pumps 1P51A and 1P51D which appeared to bear evidence of "earlier" weld repairs. The licensee stated (after the exit interview) that documentation pertaining to these areas could not be located on site.

The licensee had written a Nonconformance Report No. M-03-4-0-035 which was dated May 1, 1980 pertaining to the availability of documentation for welder qualifications and weld filler material certifications. This nonconformance report was later revised to include documentation pertaining to those areas which appeared to have had prior weld repair. This licensee is planning an audit trip to the pump suppliers shops.

4. Investigation - Construction Activities Pertaining to Installation of Heating, Ventilating and Air Conditioning (HVAC) Systems

During the reporting period additional allegations were received pertaining to poor construction practices of The Zack Co. - a subcontractor to the Bechtel Corp. responsible for installation of HVAC systems. As a result of these allegations the investigation initiated in March 1980 continued into the reporting period covered by this report. (NRC Inspection Report No. 50-329/80-12; 50-330/80-13). This portion of the investigation involved the effort of a Regional Based Investigator and the Resident Inspector. The results of these investigative efforts will be included with the other portions of the investigation and documented in a separate NRC Inspection Report. (NRC Inspection Report No. 50-329/80-10; 50-330/8011).

5. Ruskin Fire Dampers - 10 CFR Part 21

During the reporting period the Resident Inspector was informed that Ruskin Manufacturing Co. had issued a letter modifying the proposed modification which was intended to retain negator type closure operings in vertical NIBD23 Fire Dampers. The proposed "fix" which was included with the original 10 CFR Part 21 notification used a No. 6 machine screw to keep the closure spring from slipping from a spring holding bracket. The present recommended "fix" is to use a snap-in strip developed by Ruskin to retain the negator type closure springs in the spring holding bracket. The Zack Co. and Bechtel Corp. have been notified of this change to the Part 21 notification.

Exit Interview

The Resident Inspector met with licensee representatives (denoted under Persons Contacted) on April 28, 1980. The inspector summarized the scope and findings of the inspection effort to date. The licensee acknowledged the findings reported herein. In addition to these meetings, the Resident Inspector participated in investigation summary meetings on April 18 and April 25, 1980, to discuss the Zack Co. investigation efforts to date with the licensee.

Attachment: Preliminary Inspection Findings