

Omaha Public Power District
1623 Harney Omaha, Nebraska 68102
402/536-4000

April 5, 1984
LIC-84-091

Mr. James R. Miller, Chief
U. S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Division of Licensing
Operating Reactors Branch No. 3
Washington, D.C. 20555

References: (1) Docket No. 50-285
(2) Letter OPPD to NRC (Jones to Clark)
dated September 1, 1983, LIC-83-222


Dear Mr. Miller:

Fort Calhoun Station Unit No. 1
Control of Heavy Loads, Phase I

On May 17, 1983, the Commission provided Omaha Public Power District with a draft Technical Evaluation Report (TER) written by Franklin Research Center. Based on this TER, a commitment was made (Reference 2, "Response to Open Item 2") to develop an inspection program for the reactor vessel head lift rig and upper guide structure lift rig.

Subsequent to our response, telephone conversations were held on February 29 and March 18, 1984, with your staff and technical reviewers in an effort to resolve the remaining open items. Specifically, the District was requested to: (1) make a commitment to do NDE on all critical welds on the reactor vessel head lift rig, and (2) provide justification for not doing a 150% load test. As a result of these conversations, the District is revising the response to Recommendation/Open Item #2. This revised response is attached and should replace the previous response found in Reference 2 ("Response to Open Item 2").

Sincerely,


W. C. Jones
Division Manager
Production Operations

8404130243 840405
PDR ADOCK 05000285
Q PDR

WCJ/DJM/rh-J

Attachment

cc: LeBoeuf, Lamb, Leiby & MacRae
1333 New Hampshire Avenue, N.W.
Washington, D.C. 20036

Mr. E. G. Tourigny, Project Manager
Mr. L. A. Yandell, Senior Resident Inspector
Employment with Equal Opportunity
Male/Female

A033
1/1

REVISED RESPONSE TO RECOMMENDATION/OPEN ITEM #2

References: 1) NRC Letter dated May 17, 1983
2) OPPD letter No. LIC-83-222 (page 2) dated Sept. 1, 1983

In order to resolve Open Item #2, we propose the following:

(A) Inspection Program:

1) The District will develop an inspection program for the reactor vessel closure head and upper guide structure lift rigs. The program will include visual inspection on all exposed welds on the reactor vessel head lift rig and upper guide structure lift rig during every refueling outage. This program will be implemented during the 1984 refueling outage.

2) In addition, non-destructive testing (NDT) will be performed on all critical welds on the reactor vessel head lift rig at an interval not exceeding five refueling outages. Criteria for evaluating welds shall be per the industry codes.

The critical welds on reactor vessel head lift rig are identified below:

<u>No.</u>	<u>Weld Connection</u>	<u>Type of Weld</u>	<u>No. of Welds</u>
1.	Lifting Eye & Lugs (3) (Two Welds per Lug)	Full Penetration Weld	3
2.	Corner Plates (3) & Pipe (3) (Two Welds per Location)	Fillet Weld	6
3.	Tubing Lifting Eye & Tube	Fillet	3
4.	Tube & Tube Shell (10 Welds per Location, 3 Locations)	Fillet	30

3) If any major repairs are required, the welds will be repaired per approved procedures. Non-destructive testing will be performed again to verify that the welds are acceptable. The lift rig shall be 100% load tested for actual load after any major repairs and inspected in accordance with ANSI N14.6-1978 Section 5.3.1-(1).

4) Section 5.3, 5.4 and 5.5 of ANSI N14.6-1978 will be used as guidance when these procedures are written. These inspections will be performed and documented by quality control personnel.

(B) Load Test:

Per our engineering judgment, the District believes that a 150% overload test on the reactor vessel lift rig as recommended per this open item will not result in any significant improvements in the safety of load handling operations at the Fort Calhoun Station. This conclusion is based on the following:

- 1) An engineering evaluation was conducted on the design parameters specified for the lift rig. It was concluded that the design stress margins were substantial.
- 2) The mechanical design is comprised of a simple welded tripod frame which is connected to a cylindrical shell (attached to the RV head) with alignment pins. These pins are the only mechanical joints which require assembly when engaging the lift rig to the shell. Thus, due to the simplicity of the design, assembly error is highly unlikely.
- 3) The critical welds on the lift rig have been identified and the District shall perform Nondestructive Examinations (see item A above) at an interval not exceeding five refueling outages.
- 4) The lift rig was manufactured and supplied by a reputable NSSS vendor, (Combustion Engineering).
- 5) The lift rig has been used over the last 10 years without any signs of degradation.

Based on the above, the District takes exception to doing a 150% load test.