



Carolina Power & Light Company

September 10, 1979

Entire File
50-261

19 SEP 12 48:50
USING RECORD
11 AM '79

FILE: NG-3513 (R)

SERIAL: GD-79-2254

U. S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Washington, DC 20555

Attention: Director, Division of Reactor Construction Inspection

H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2
DOCKET NO. 50-261
LICENSE NO. DPR-23
RESPONSE TO I.E. BULLETIN NO. 79-15

Gentlemen:

We have reviewed plant records with respect to the deep draft pump deficiencies identified in I.E. Bulletin No. 79-15. The pump models described in I.E. Bulletin No. 79-15 are not utilized in safety related systems at the H. B. Robinson Plant.

However, our four (4) service water pumps, which are Johnston vertical mixed flow pumps (Serial Numbers GC-2706, JZ-6435, JZ-6437, and JZ-6438) are of the type described in I. E. Bulletin No. 79-15 with exception of manufacturers and system in which utilized.

Our pumps were made by Johnston Pump Company. They have a rated capacity of 8,000 GPM and 120 ft. TDH. For overall dimensions of pump see Figure 1.

Preoperational Test No. PO-55 was performed in 1970 on the service and cooling water system. Part of this test involved testing the four service water pumps. The service water pumps were tested with discharge open to maintain pump discharge head between 52 psig and 54 psig. Also pump rotation direction, operating current, voltage, and evidence of any unusual noise or vibration were checked.

Other testing consisted of quarterly interval service water system component tests which involve verifying service water pump pressures and vibration.

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Operational problems and major repair efforts as indicated by routine maintenance history follows:

<u>DATE</u>	<u>COMPONENT</u>	<u>PROBLEMS</u>	<u>CORRECTIVE ACTION</u>
10-4-71	"B" service water pump motor	Breaker tripped open	Motor was megged and bridged then restarted. Pump ran satisfactorily.
4-13-73	A, B, C, & D pump motors	Disassembled for inspection	"B" pump motor Lower bearing was replaced
11-5-73	"D" pump	Packing leak	Adjusted
12-21-73	A, B, C, and D pumps discharge pressure guages	Needed recalibration	Calibrated
6-4-74	"D" pump motor	Vibration	Bearings were replaced
11-19-75	"A" pump	Down in capacity	Replaced with spare pump. Old pump was rebuilt. (This was prior to system being determined safety related)
3-22-77	"B" pump	Down in capacity. All ball bearings, all discharge bearings, pump shaft, both lower & upper line shafts & the suction bell were worn excessively.	Rebuilt spare pump was installed
5-25-77	"C" pump	Down in capacity. The suction end bell, suction impeller, all ball bearings, discharge head bearing, stuffing box bearing, both column bearings, lower head shaft, line shaft and the pump shaft were worn excessively.	Rebuilt spare pump was installed

<u>DATE</u>	<u>COMPONENT</u>	<u>PROBLEMS</u>	<u>CORRECTIVE ACTION</u>
1-6-78	"C" pump	Down in capacity	The impeller clearance was set. Pump changed out later and rebuilt replacing the following parts: 2nd & 3rd stage impellers, column bearings, suction bell bearings, lower and upper discharge bearings and packing box bearings.

From 3-7-71, the date that is used as our in-service date, there is no definitive data to determine the number of cycles or the duration of each cycle for the service water pumps. However, the longest interval that each pump ran without corrective maintenance is as follows:

"A" pump - 4 years 8 months; "B" pump - 6 years; "C" pump - 6 years 2 months; and "D" pump - 8 years 5 months.

The preceding time periods are estimates made from a review of our trouble and work reports.

If you have further questions regarding this matter, please contact me.

Very truly yours,



B. J. Furr

Manager

Generation Department

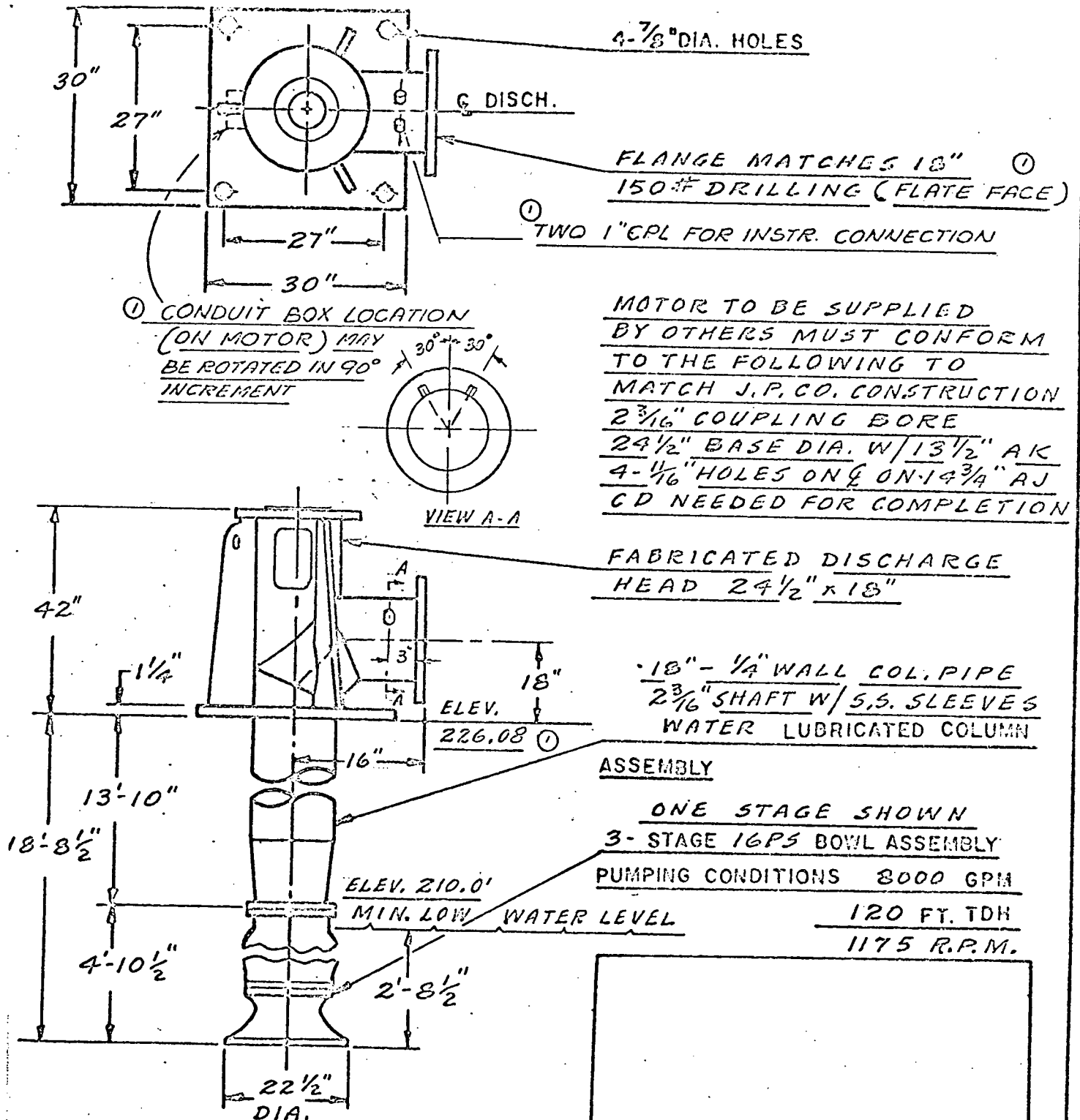
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Attachment

cc: Mr. J. P. O'Reilly

Figure 1

JOHNSTON MIXED FLOW PUMP



CUSTOMER-EBASCO SERVICES INC.
FOR-H.B. ROBINSON STEAM ELEC. PLANT
SERVICE WATER PUMPS
PO# NY-434128

JOHNSTON SERIAL NO. JZ-6435-38
JOHNSTON QUOTE NO. NYE 142

J.T. 1-9-67 V.R.K.S. ① ADDITIONS

DO NOT USE FOR CONSTRUCTION
UNLESS CERTIFIED ABOVE

WEIGHT = APPROX. 3500#

JOHNSTON PUMP COMPANY

DRWG. DP-J

11-1703-A