

Babcock & Wilcox

Power Generation Group

To C. R. WEYERS - MARINE FIELD SERVICE - I&M NEW YORK

From D. A. MALMAN - MARINE FIELD SERVICE - I&M NEW YORK

6060A-1

Cust. EXXON COMPANY - NEWPORT NEWS SB&DD CO.

File No.
or Ref. MB-4480

Subj. SS EXXON GETTYSBURGH - BOWED WATERWALL TUBES IN
PORT AND STARBOARD BOILERS

Date
JUNE 27, 1978

This letter to cover one customer and one subject only.

In response to a request from Mr. W. Ingham, Port Engineer for Exxon Company, USA, the writer, in company with C. R. Weyers inspected bowed rear waterwall tubes in port and starboard boilers of subject vessel.

Vessel was undergoing biennial inspection and repairs at the Newport News Shipbuilding & Dry Dock Co., Newport News, Virginia; our inspection was accomplished June 16, 1978 following an earlier meeting June 15th with Mr. Ingham and Mr. C. K. Worthington, Construction Superintendent for NNSB&DD Co.

Our inspection found random bowing of rear waterwall tubes toward the furnace. The bowing was fairly gentle and uniform with the apex about midway between top and bottom ends. There were no blisters nor other signs of tube metal distress.

A copy of the attached listing of tube bowing found was given to Messrs. Ingham and Worthington at a post inspection meeting June 16th.

We recommended straightening and realigning all rear wall tubes, total removal of all plastic refractory installed between and behind the rear wall tubes and complete renewal of rear wall refractory and insulation; the firebrick to be of B&W 80 quality. It was expected that when all refractories and slag binding the tubes in the observed bowed condition were removed the free standing tubes would then be appreciably straighter. In any event, however, all tubes were to be straight before the new rear wall refractory was installed. All tubes were to be left free standing.

The operators were advised to henceforth remove all slag and debris from behind and/or between the tubes during future furnace inspections.

Send copies of this report to W. Ingham, Port Engineer and E. J. Worrell, Assistant Repair Supt., Exxon Co., USA, Box 1512, Houston, Texas 77001.

Att.
/jg
Regular Distribution

- D. A. Malman -

EXX-MOR-010789

SS ESSO GETTYSBURGH
BOILER REAR WALL TUBES

APPROXIMATE AMOUNT OUT OF LINE

TUBE COUNTING FROM OUTBOARD SIDE OF BOILERS.

<u>TUBE NO</u>	<u>PORT BOILER</u>	<u>TUBE NO</u>	<u>STARBOARD BOILER</u>
1 - OK	19 - 2"	1 - OK	19 - 1/2"
2 - ^{PARTIALLY} CONCEALED BY CORBEL - OK		2 - 2"	20 - 1/2"
3 - OK	21 - 2"	3 - OK	21 - 1"
4 - 2"	22 - OK	4 - 2 1/2"	22 - 1/2"
5 - OK	23 - 2 1/4"	5 - 1/2"	23 - 3/4"
6 - OK	24 - OK	6 - 2 1/2"	24 - 2"
7 - 1"	25 - 2 1/4"	7 - 1/2"	25 - 1/2"
8 - OK	26 - OK	8 - 2"	26 - 1/2"
9 - 1"	27 - 2 1/2"	9 - OK	27 - 1/2"
10 - OK	28 - OK	10 - 2"	28 - 1/2"
11 - 1"	29 - 2 1/2"	11 - 1"	29 - 1/2"
12 - OK	30 - OK	12 - 1/2"	30 - 1/2"
13 - 1"	31 - 1 1/2"	13 - 1"	31 - 1/2"
14 - OK	32 - 3"	14 - 3/4"	32 - 1"
15 - 1"	33 - OK	15 - 3/4"	33 - 1/2"
16 - OK	34 - OK	16 - 1"	34 - 1/2"
17 - 2"	35 - OK	17 - 1"	35 - 1 1/2"
18 - OK		18 - 2 1/2"	

TUBE BOWING FAIRLY UNIFORM BETWEEN TOP & BOTTOM ENDS.
TUBES #1 CONCEALED BY REFRACTORY CORBEL IN CORNERS.
DIMENSIONS GIVEN ABOVE ARE AS TUBES EXIST AND
ARE INCLUSIVE OF REFRACTORY AND/OR OTHER SLAG
HOLDING TUBES IN BOWED POSITION.