

OPERABILITY TEST REPORT
FOR
TARGET ROCK THREE STAGE SRV
FOR
LOW PRESSURE WATER TESTS
FOR
GENERAL ELECTRIC COMPANY

175 Curtner Avenue
San Jose, California

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TEST REPORT NO. 17476-03

Revision A

TABLE I

TEST LOG FOR SRV TR-2

TEST NO.	TEST MEDIA	LOAD LINE CONFIGURATION	TEST DATE	REMARKS
201	Steam	I	3/10/81	Back pressure low. Test Unacceptable.
202	Steam	I	3/10/81	Installed 6.8" orifice. Test Acceptable.
203	Water	I	3/10/81	Test Acceptable.
204	Steam	I	3/11/81	Test Acceptable.
205	Water	I	3/11/81	Pipe loads high. See NOA # 5.
206	Steam	I	3/11/81	Test Acceptable.
207	Water	I	3/11/81	Not Acceptable. Low steam chest pressure.
208	Water	I	3/11/81	Test Acceptable. Water temperature low.
209	Water	I	3/30/81	Test Acceptable.
210	Water	I	3/30/81	Test Acceptable.
211	Water	I	3/30/81	Test Acceptable.

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NOTICE OF ANOMALY

NOTICE NO. 5 P. O. NUMBER: 205-XH212 WYLE JOB NO. 17476-03

CONTRACT NUMBER: N/A

CATEGORY: SPECIMEN PROCEDURE TEST EQUIPMENT DATE: 3/14/81

TO: General Electric Company ATTN: Mr. R. Miller

PART NAME: Target Rock 3-Stage SRV PART NO. N/A

TEST: Low Pressure Water I. D. NO. TR-2

SPECIFICATION: WTP 17450-01 PARA. NO. N/A

NOTIFICATION MADE TO: J. Mross/A. Sallman DATE: 3/14/81

NOTIFICATION MADE BY: L. Millsaps VIA: Verbal

REQUIREMENTS:

N/A

DESCRIPTION OF ANOMALY:

When the water control valve was opened to initiate the test, the entire system was subjected to a shock wave similar to water hammer. As a result, loads of approximately 10,000 and 16,000 pounds were observed at Struts 1 and 2. Review of the recorded data showed no abnormal pressure in the discharge line, but did show sharply varying pressure in the steam chest and inlet water pipe.

DISPOSITION - COMMENTS - RECOMMENDATIONS:

The recorded data shows that the anomaly occurred in the inlet piping and/or steam chest and, therefore, was not caused by the SRV. The probable cause was the forming of vapor in the inlet pipe because of the higher water temperature (233°F) and the low pressure (8 to 10 psig). The vapor then compressed when subjected to the higher pressure water (300 psig), thus causing a shock wave in the water system. Since the discharge pipe loads were caused by the shock wave rather than the SRV, the data must be considered invalid.

The test was not repeated. However, three other water tests were conducted on this SRV, and all data was consistent. In addition, water tests were performed on a two-stage Target Rock SRV, and no anomalies occurred.

It is, therefore, recommended that the test not be repeated.

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