PDS-21091-4 (2-75)

SITE PROBLEM REPORT

BABCOCK & WILCOX

CUSTOMER Oconee III	CONTRACT NO. NSS-09	SPR NO. 107	REV. NO.
VENDOR Dresser P.O. NO. 20158LS	TASK NO. 28	GROUP NO. 41	SEQ NO. 003
SITE ENGINEER F.G.Grisbaum	REQ'D RESOL DATE	REQ'D COMP. DATE For info only	

TITLE ELECTROMATIC RELEIF VALVE MALFUNCTION

DESCRIPTION OF PROBLEM On Friday, June 13th, Duke reduced power to 12% FP in preparation to cold shutdown for RCP seal replacement. During the transition from turbine to turbine bypass the primary system experienced a pressure transient to 2267 psig. The power relief valve actuated at 2257 psig and failed to close. This caused the Quench Tank rupture disc to rupture. Failure to promptly close the power relief isolation valve caused violations of the fuel compression curve, cooldown rates and RC pumps NPSH curve. Inspection of the power relief valve after shutdown indicated that the pilot valve lever had remained in the ported position preventing the main valve from reseating. Restraint of the lever was caused by corrosion of the lever pin, lever hinge and solenoid bracket.

STATUS - ACTION TO DATE INCLUDING PERSONS CONTACTED
JT Janis, NSD, Lynchburg, KR Ellison, NSD, Lynchburg, advised of problem. Valve has been repaired (6/20/75) and reinstalled. Repair was effected by increasing the clearance for the lever pin in both the solenoid bracket and the lever hinge bearing points. Valve pilot disc and seat were refurbished to achieve right seating.

FURTHER ACTION RECOMMENDED BY SITE PERSONNEL

Sites be advised to conduct periodic inspection/operation of valve to insure operability. When plant shuts down, perform manual/visual checks for freedom of motions.

F.G. Grisbaum — Gael T. Jones — 6/27/75

RESOLUTION

RESOLUTION See further action.

SITE INSTRUCTION ISSUED ADVISING INSPECTIONS TO PREVENT PROBLEM FROM OCCURRING AT OTHER SITES.

APPROVED BY	SIGNATURE	DATE
N.S. SUPPORT ENGINEER		7/21/75
TASK ENGINEER N.S. UNIT MANAGER		11/14/75
PLT. START-UP MGR/SERV. & MAINT. MGR.		11/15/75
PROJECT MANAGER/ CONTRACT ENGINEER	C. A. Creary	7-22-75

☐ NORM ☐ C ☐ D ☐ G ☐ L ☐ VENDOR CLAIM

COST CATEGORY

AUTH. CHARGE NO. ☐ FIELD CHANGE REQ FC NO.

COMPLETION

SITE COMPLETION REPORT F.C. NO 113 issued 12/1/76 C Clay

DEVIATIONS ☐ NONE ☐ SEE SPR REV. NO. ____

DATE COMPLETED SIGNED BY

S.O.M. CONST. REP. APPROVAL DATE

INSTRUCTIONS FOR PDS-21091 - SITE PROBLEM REPORT

Initiated by B&W Construction or NPGD Nuclear Service

(1) Originator - Fill in: Customer; Contract Number; Vendor; Purchase Order Number; Task Number; Group Number; Sequence Number; Name; Title; Description of Problem; Status; Further Action Recommended by Site Personnel; Originator Signature and Date; Vendor Claim (NPGD only - if applicable)

(2) Senior B&W Construction Co. Site Representative or Site Operations Manager - Fill in: SPR Number; Revision Number; Req'd. Resol. Date; Req'd. Comp. Date; Approval Signature; Date.

(3) Nuclear Service Support Engineer - Fill in: Cost Category; Authorized Charge Number.

(4) Nuclear Service Unit Manager and/or Task Engineer - Fill in: Resolution; FC Req. and FC Number; Signature and Date.

(5) Plant Start-up Section Manager or Service and Maintenance Unit Manager - Approve Resolution; Signature; Date.

(6) Project Manager or Contract Engineer - Verify Charge Number; Approve Resolution; Signature and Date.

(7) Senior B&W Construction Co. Site Representative or Field Engineer - Implement resolution; upon completion, fill in: Completion Report; Date Completed and Signature.

(8) Site Operations Manager or Senior B&W Construction Co. Site Representative - Approve completion; sign.

LONGHAND MEMORANDUM — THE BABCOCK & WILCOX COMPANY

TO

FROM

CUST. — FILE NO. OR REF.

SUBJ. — DATE

1) Need Info on Jan. 13 1975 Oconee transient

73-789-7195

SPR

75-7 Abnormal Occurrence to the NRC

Boron built up at PORV caused it to stick open

NSS- 9
SIR 107

TITLE ELECTROMATIC RLF VLV MALFUNC.

RELATED SPRs

This SPR has been reviewed by Task Engineering Groups and is applicable to NSS- 00. The following is the status and/or resolution of this SPR on other contracts.

REMARKS

The occurrence on this SPR is possibly generic to other plants. It has been taken care of by Ken Wandling writing an SIP to all sites to maintain an inspection of these moving parts. The writer of this SIP should notify the generic concerns of this problem. Done 7/15/75 SJH.

RLP
7/16/75

NSS-

(3)

SITE PROBLEM

REPORT TRANSMITTAL

**** CLEARED ****

FILE: 12M2

TO: _____ For Information

Central Engineering Files

C. C. Plunkett - Contract Admin.

S. H. Klein - Quality Assurance

R.G Burnley - Task Engineer

CA Creacy - Project Manager

CONTRACT NO: 620-00 09

SPR 107

TITLE Electromatic Relief Valve Mal-Function

DATE: 11-21-75

The attached, cleared SPR is submitted for your information.

TO: _____ E. L. Logan - FLORIDA _____

_____ L. C. Rogers - MET.ED. _____

_____ R. J. Baker - TOLEDO _____

_____ B. L. Day - Intl. Support _____

_____ P. E. Perrone - OPR _____

Attached is one copy of Site Problem Report No. 107 which was processed on Contract 620-00 09. Future contracts have been reviewed for the potential of a similar problem. This problem [redacted] is not considered applicable to other contracts _____.

REMARKS: _____

cc: G. M. Jacks - Plant Integration

This SPR has been reviewed IAW NPG-1707-01

Mike VanDeKar

NUCLEAR SERVICE SUPPORT ENGINEER

CLEARED

0244