

H4
8/20/82

MEMO TO FILE

SUBJECT - TMI #1 DEMO AT MT. VERNON ON 8/5/82
KINETIC TUBE EXPANSION - B+W OTSG.

H. GRAY AND F. YOUNG OF RI TRAVELED TO THE
B+W PLANT AT MT. VERNON, IND TO OBSERVE KINETIC
EXPANSION OF TUBES IN A FULL SIZE ONCE THRU
STEAM GENERATOR (OTSG) LIKE THAT AT TMI #1.

ATTACHED IS THE LIST OF ATTENDEES AND THE AUG 5/82
KINETIC EXPANSION PROCESS PRESENTATION FOR THE NRC
BY GPMH, B+W, FWH&A.

PRIOR TO THE DEMONSTRATION, H. GRAY PRESENTED TO
CONRAD McCRAKEN (NRC) THERE LIST OF CURRENT
CONCERNS BY H. GRAY & S. REYNOLDS DATED 8/2/82 FOR
CONSIDERATION.

AT THIS POINT, NO KNOWN PROBLEMS EXIST WITH THE
KINETIC EXPANSION PROGRAM FOR REPAIR AS PLANNED.

H. GRAY
8/20/82

CC: S. EDWARDS/J. DARR./REYNOLDS

8/2/82
HA/SR

TIME I -

OTSG - Tube Rep. - Exp Exp (Blasting)

(()) = Comment
81

- 1) H_2O IN CREVICE - How to REMOVE BEFORE BLASTING.
EFFECTIVENESS OF REMOVAL.
- 2) 14" BLAST - DOUBLE SHOT - optimum - why not 18-20".
EFFECT ON # TO PLUG. ((Now 17" on Most, 22" on some))
- 3) Exp-Exp - NO TUBE LENGTH CHANGE. \therefore NO STRESS CONDITION CHANGE.
WHERE IS TEST DATA TO BACKUP?
- 4) How much TUBE LENGTH CHANGE IS OK? ((UP TO 1/4" ALTHOUGH
EXPOSED CHANGE \approx ZERO))
- 5) How to MEASURE TUBE LENGTH CHANGE?
- 6) IF DESIGN REQUIRED 1/4" T₁ FILLET TUBE WELD BUT CODE REQ.
ONLY 3/8" T₁ WILL EXP-EXP MEET DESIGN REQUIREMENT FOR
SEVERED TUBES? ((NEW # \approx 350)) \rightarrow ((FSAR CLAIMS CREDIT FOR SEAL WELD
ONLY))
- 7) WITH 700 TUBES PLUGGED, WHAT IS EFFECT ON THERMAL
HYDRAULICS & ON PRESTRESS?
- 8) WHICH IS BETTER - PLUG + BLAST OR
BLAST + PLUG
- 9) EFFECT OF SEVERED AND NON SEVERED TUBES ON STRESS CONDITION
OF OPERATING TUBES. ((# OF SEVERED TUBES IS LOW ENOUGH
TO NOT BE SIGNIFICANT))
- 10) IF NEW CONSTRUCTION WOULD BTW ALLOWING EXP-EXP IN LIEU
OF TUBE/TS WELDING. ((WOULD PROBABLY RECOMMEND BOTH))
- 11) R&R SELF VIII APPX A
- 12) RESIDUE - EFFECT OF, COMPOSITION OF AND REMOVAL
- 13) LEAK TEST - He pressure vs N_2 -
((SITA METHOD 61612))
- 14) EC OF REMAINING TUBE - How? IS THIS THE BEST APPROACH?
DETAILS OF HOW BRINE DING. WILL DETECT TUBE DAMAGE?
- 15) TUBE MFL - OK?

Kinetic Expansion Demonstration

Mt. Vernon

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