PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION CONTROL BLOCK: 2 2 0 0 0 - 0 0 0 0 0 - 0 0 3 4 1 1 1 1 1 0 57 CAT N'T L 6 0 5 0 0 0 3 3 6 0 0 3 1 3 8 0 8 0 6 2 4 8 0 9 60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80 REPORT 1 SOURCE EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10) Following a full power plant trip (3/13/80), 2 broken saddle clamp bolts 127 were found on hanger 490008. Following a second trip (3/22/80), an additional 3 clamp bolt was found broken on hanger 490002. Following a plant shutdown 4 (5/08/80), the second clamp bolt on hanger 490002 was found broken. Both hangers 5 are hydraulic snubbers on the 28 inch steam leads downstream of the turbine control 6 The unit complied with Technical Specification 3.7.8.1 in each case. A11 valves. 7 bolts were low carbon steel. 490008 bolts, 1 1/2 inch UNF. 490002 bolts, 1 3/4 8 inch UNC. COMP. SUBCODE CAUSE CODE CAUSE COMPONENT CODE SUBCODE SUBCODE CODE D (15) Z (16) B (13) | S | U | P | O | R | T | (14) H | B (11) E (12) 9 20 18 19 13 12 11 REVISION OCCURRENCE REPORT SEQUENTIAL REPORT NO. CODE TYPE NO. EVENT YEAR LER/RO 2 0 3 REPORT 81 01 0 11 11 I L NUMBER 77 30 31 27 28 COMPONENT NPRD-4 PRIME COMP. ATTACHMENT METHOD EFFECT ON PLANT ACTION FUTURE TAKEN ACTION HOURS (22) SUPPLIER MANUFACTURER FORM SUB. SUBMITTED |B | 1 | 3 | 0 |(00041 N 24 A (25) Y 23 Z (21) Z (20) (18) Z (19) A 36 CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27) All failures were a combination of fatigue and high impact loading. The 0 failed bolts and bolts on other similar saddle clamps downstream of the turbine 1 stop valves were replaced with high strength bolts for high temperature service 2 (ASME A-193, Grade B7). The improved fatigue characteristics of this low alloy 3 steel should prevent a recurrence. 4 METHOR JE OTHER STATUS (30) DISCOVERY DESCRIPTION (32) FACILITY * POWER B (31) Operator Observation 0 3 0 (29) NA D (28) 5 80 4.4 45 45 ACTIVITY CONTENT LOCATION OF RELEASE (36) AMOUNT OF ACTIVITY (35) RELEASED OF RELEASE Z 33 Z 34 NA NA 6 10 11 PERSONNEL EXPOSURES 45 DESCRIPTION (39) TYPE NUMBER NA 0 0 J 37 Z 38 7 PERSONNEL INJURIES DESCRIPTION (41) UMBER 01010 (40) NA 8 11 12 LOSS OF OR DAMAGE TO FACILITY (43) DESCRIPTION NA Z (42) 9 10 NRC USE ONLY PUBLICITY DESCRIPTION (45) SSUED NA L (4.) 0 68 °R 0029010450 (203) 447-1791 Carl Clement PHONE NAME OF DECONDED

ATTACHMENT

LER 80-11/3L-2 Millstone Unit ? Docket No. 50-33c

EVENT DESCRIPTION

During power ascension on 3/13/80 following a full power plant trip, two broken pipe saddle clamp bolts were found on hydraulic snubber hanger 490008. This hanger is located on a main steam lead prior to the HP turbine. The plant was at 30% power and the power ascension was halted until the broken bolts (1-1/2" UNF capscrews) were replaced. All other hangers on the HP turbine steam leads were inspected satisfactorily.

Following another full power trip, with the plant at 99% power on 3/22/80, a broken saddle clamp bolt was found on hydraulic snubber hanger 490002. The bolt (1-3/4" UNC machine bolt) was replaced and inspection revealed no other broken bolts on similar hangers. Both bolts were carbon steel.

Following a plant shutdown, including a turbine trip, on 5/08/80 the second saddle clamp bolt on hydraulic snubber hanger 490002 was found broken. At this time the carbon steel bolts on all similar saddle clamps were replaced with "low alloy steel bolting material for high temperature service" (ASME A-193, Grade B7).

These events resulted in declaring hangers 490008 and 490002 inoperable and the plant was operated in accordance with Technical Specification Action Statement 3.7.8.1 in each case.

CAUSE DESCRIPTION

The bolt failures were caused by fatigue of the low carbon steel material. In each case, the final failure was a result of the impact loading of the turbine stop and control valves tripping. All saddle clamp bolts on similar hangers restraining the steam leads downstream of the turbine stop valves were replaced. The replacement bolting is low alloy steel bolting for high temperature service. (ASME A-193, Grade B7). The improved fatigue characteristics of this material should prevent recurrence.

There are no safety implications from these events in that these pipe supports are provided for a non-safety related purpose. The original hydraulic snubber Technical Specification submittal included all snubbers in the plant. A change is pending to include only safety-related snubbers.