

# TERRY CORPORATION

AMBERTON ROAD • WINDSOR, CONNECTICUT U.S.A.  
A SUBSIDIARY OF INGERSOLL-RAND

REPORT NO.

3

## REPORT OF POTENTIAL SAFETY HAZARD, 10CFR21 (PART 21 OF TITLE 10 OF THE CODE OF FEDERAL REGULATION)

TO: DIR. OF ENG. D. R. Morrow FILE NO. 22368 & 37494  
MGR.-NUCL. PROD. H. Sirois SER. NO. 36531 & T-37494A  
UTIL. MKT. MGR. K. Fahrbach TYPE CCS  
VP-QUAL. ASSUR. R. Neeld REF. Telex from SNM  
SERVICE MGR. R. Theroux DATED Dec. 19, 1977

PREPARED BY R. Theroux DATE 12/19/77

PIECE NO. \_\_\_\_\_ DRAWING NO. \_\_\_\_\_ REV. \_\_\_\_\_

PART NAME Rev. Chamber Lock Plate Screws QUAN. \_\_\_\_\_

DESCRIPTION OF POTENTIAL SAFETY HAZARD OR NON-COMPLIANCE: \_\_\_\_\_  
Recent breakage of lock plate screws at Peach Bottom coupled with attached telex from SNM indicates a design problem which could cause reversing chambers to break free and affect operation of HPCI units.

ENGINEERING EVALUATION & RECOMMENDATION: Does not constitute a reportable safety hazard.  
A design improvement is required to eliminate breakage of screws #DT5U066 shown on attached drawing HW-12877.  
Engineering to devise a retrofit kit for field modifications of all affected units. Upon availability of kits, customers are to be notified of the design improvement and correction procedure.

APPROVED BY DIR. OF ENG.: D.R. Morrow DATE: 1/5/78

THIS DEFECT OR NON-COMPLIANCE -  
\_\_\_\_\_ CONSTITUTES A SAFETY HAZARD AND REQUIRES THAT A REPORT BE PREPARED BY NAME:  
\_\_\_\_\_ DATE: \_\_\_\_\_

MM DOES NOT CONSTITUTE A SAFETY HAZARD AND DOES NOT REQUIRE ANY FURTHER REPORTING.

APPROVED BY/TITLE: M. Neeld President DATE: 1-5-78

RETURN TO DIRECTOR OF ENGINEERING:

REVISIONS

SYM	DESCRIPTION	DATE	APPY.	ECN

LONG LOC DYNA THREAD  
CREW # DT5U066 - 1" LONG

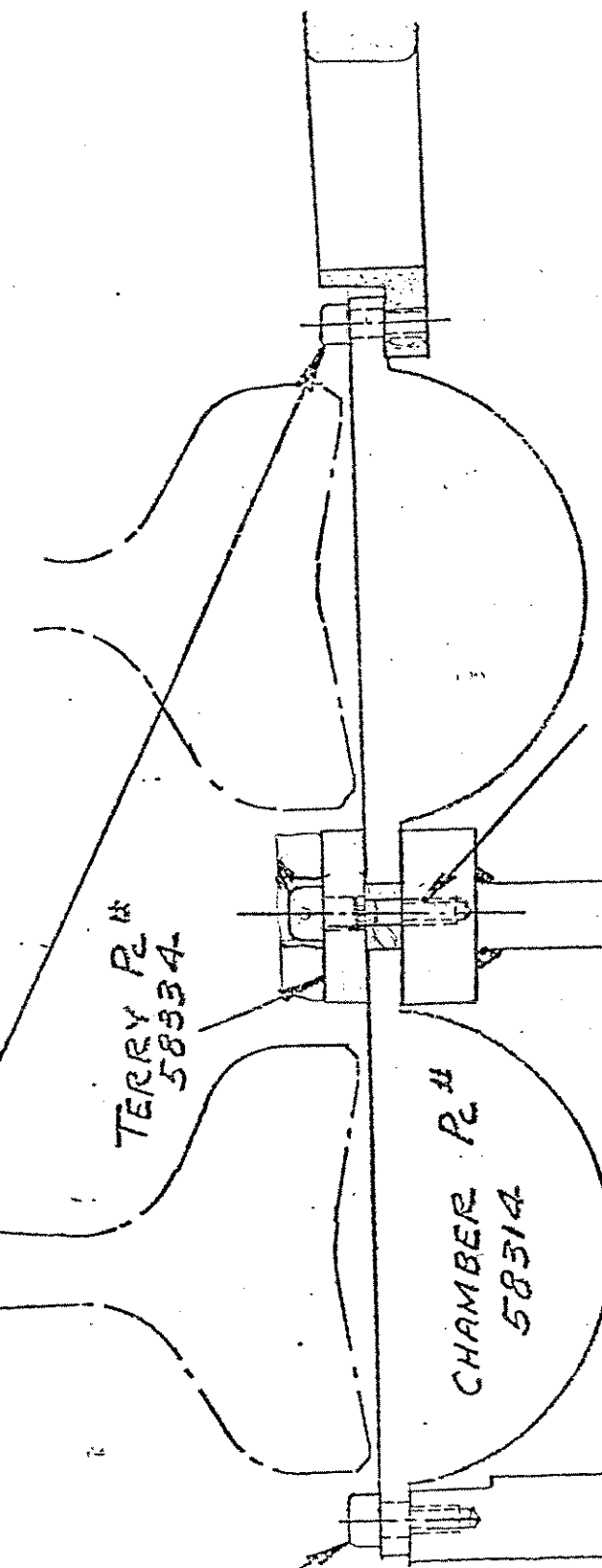
TERRY P2 #  
58534

CHAMBER P2 #  
58514

CHAMBER  
RING P2 #  
58141

SHAKE-PROOF  
LOCKWASHER  
PART # 1428-00

LONG LOC DYNA THREAD  
# DT5U066 - 1 1/2" LONG



THE TERRY CORPORATION  
LAMBERTON RD., WINDSOR, CONNECTICUT U.S.A.  
A Subsidiary of Ingersoll-Rand

TITLE  
REVERSING CHAMBER FASTENING  
CCS

DRAWING NO. 12-8-77

DRAWING NO. HW-12877

CHECKED  
APPROVED

12/8/77

SHEET 1 OF 1

<u>PROJECT NAME</u>	<u>START</u>	<u>HPCI</u> <u>SERIAL NUMBER</u>
TVA #1 Browns Ferry	8/74	35933 (22368-3)
TVA #2 Browns Ferry	2/75	36416 (22368-I)
TVA #3 Browns Ferry	11/76	36549 (22368-J)
→ PEACH BOTTOM #2	7/74	36213 (22368-G)
PEACH BOTTOM #3	12/74	36531 (22368-K)
MONTICELLO	6/71	35932 (22368-2)
NUCLENOR		35931 (22368-1)
VERMONT YANKEE	11/72	36101 (22368-4)
PILGRIM	12/72	36216 (22368-E)
FITZPATRICK	3/76	36214 (22368-H)
COOPER	2/75	36275 (22406-B)
HATCH #1	4/75	36680-A
CAROLINA #1		36682-A
CAROLINA #2		36682-B
FUKUSHIMA #1	3/71	36215 (22368-C)
FUKUSHIMA #2	7/74	36684-A
ENRICO FERMI II		36680-A
LIMERICK I		36690-A
LIMERICK II		36690-B
DUANE ARNOLD		36694-A
LILCO		36692-A
HATCH #2		37120-A
NEWBOLD #1		37122-A
NEWBOLD #2		37122-B
CHINSAN #1		37124-A
CHINSAN #2		37124-B
SUSQUEHANNA #1		37126-A
SUSQUEHANNA #2		37126-B
ENEL CAORSO		37128-A
FUKU III	3/76	37500-A
FUKU IV		37950-A
FUKU V		37930-A
→HAMAOKA	3/76	37494-A
SHIMANE	3/74	36869-A

All are CCS turbines with the exception of Monticello, Nuclenor and Vermont Yankee which are CS.

RCA DEC 23 0244Z  
TERYSTEAM WSOR

H-111 DEC. 23, 1977

TO: TERRY  
FROM: SHIN NIPPON MACHINERY

ATTN: MR. H. SIROIS  
MR. R.A. NEELD ✓  
MR. TAKAHASHI (MARUBENI-TOKYO)

RE: HAMA. NO. 1 LONG-LOK DYNA THRED

*1/4" 5/16" 1/2" BE*

DETAILED INFORMATION I RECIEVED FROM HAMAOKA SITE.  
TWO OF THREE SCREWS OF ONE CLAMPING PLATE WERE BROKEN AT SCREW  
HEAD AND THE CLAMPING PLATE WAS LOOSE. THEN, TOSHIBA AND CHUBU  
ELECTRIC CHECKED ALL DYNA THREDS.  
ON LOOSING THESE SCREWS, ALL SCREWS ( CLAMPING PLATE SCREWS  
(SCREW LENGTH: 32MM), REVERSING CHAMBER RING SCREWS (SCREW LENGTH:  
25MM) AND CASING SIDE SCREWS (SCREW LENGTH: 22MM) )  
WERE BROKEN AT A POINT OF 10 - 15MM FROM THE SCREW END. THESE  
BROKEN POINTS ARE NEARLY AT THE END OF THE HOLE IN THE BOLT END.  
WHAT DO YOU THINK IS THE CAUSE AND IS IT O.K. TO REPLACE THE  
DYNA THRED ( AS YOUR ADVICE OF 12-19-77 TELEX )?  
WHAT DO YOU THINK OF THE OTHER HPCI TB.S IN JAPAN MUSTWE EXCHANGE  
ALL THESE SCREWS?  
PLS RE-CHECK YOUR BASIC DESIGN AS TO USING THE DYNA-THRED.  
TOSHIBA HAS COMPLAINED TO S.N.M. THAT HAMAOKA NO.2 AND TEPCO NO.5  
HPCI TB.S' SCREWS SHOULD BE EXCHANGED TO NEW SCREWS. PLS ADVISE  
YOUR CONCLUSIONS BY DEC. 24, '77