

**AUGMENTED INSERVICE
INSPECTION PLAN**

TU ELECTRIC

COMANCHERO PEAK STEAM ELECTRIC STATION

UNIT 2

Revision 0

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AUGMENTED INSERVICE INSPECTION PLAN

The purpose of this document is to identify and describe various regulatory and CPSES commitments involving the performance of periodic non-destructive examinations (NDE) other than those addressed in ASME Section XI (i.e., augmented inservice inspection). A separate section is provided for each major activity. Within each section the following information is provided:

- a. Governing Document
- b. Exam Items & Boundaries
- c. NDE Method and Schedule
- d. Acceptance Criteria
- e. Special Reports

NOTE: Where Sections of the ASME Code are used in this document, the Edition and Addenda shall be as referenced in the CPSES Unit 2 Inservice Inspection Plan.

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REACTOR COOLANT PUMP FLYWHEELS

Each reactor coolant pump flywheel shall be subject to the examinations described in Section C.4.b. of Regulatory Guide 1.14, Revision 1, August 1975 (Ref. FSAR 5.4.1.5.2 and Tech. Spec. 4.4.9). These examinations shall consist of an in-place ultrasonic examination of the areas of higher stress concentration at the bore and keyway at approximately 3-year periods. Additionally, the exposed surfaces of each flywheel shall be subject to a liquid penetrant examination along with a complete ultrasonic examination at approximately 10-year intervals. Examination procedures and personnel shall be in accordance with IWA-2200 of Section XI to the extent practical.

The schedule for examinations shall be coincident with the inservice inspection periods and intervals described in ASME Section XI.

The acceptance limit for flaw size based upon the maximum design overspeed is 1.15 in. (Ref. WCAP-8163). All flaws detected shall be recorded for evaluation and monitored for growth rate.

No special reports are required for this activity unless examination and evaluation indicate that the 1.15 in. flaw size limit has been or will be exceeded during the service life of the flywheel. Should this occur, the NRC shall be notified (Ref. Reg. Guide 1.14 c.4.b.(5)). Records of the examinations shall be maintained with the applicable work order.

Summary Discussion

- a. Governing Document - Regulatory Guide 1.14 Rev. 1.
- b. Exam Items and Boundaries - Each reactor coolant pump flywheel.
- c. NDE Method and Schedule - An in-place ultrasonic examination of the bore and keyway at 3-year intervals and a liquid penetrant examination of exposed surfaces and a complete ultrasonic examination at 10-year intervals.
- d. Acceptance Criteria - No flaws greater than 1.15 in.
- e. Special Reports - The NRC shall be notified should the maximum flaw size be exceeded, or expect to be exceeded, during the service life.

AISI PLAN
R. C. PUMP FLYWHEEL SECTION

TAG #	EXAM	INTERVAL (10-YEAR)		1			2			3			4		
		PERIOD (10 MONTH)		1			2			3			4		
		1	2	1	2	3	1	2	3	1	2	3	1	2	3
TCX-RCPCPC-01	UT OF BORE & KEYWAY	X	X		X		X	X		X	X		X	X	
	PT EXPOSED SURFACES					X			X			X			X
	UT COMPLETE VOLUME					X			X			X			X
TCX-RCPCPC-02	UT OF BORE & KEYWAY	X	X		X		X	X		X	X		X	X	
	PT EXPOSED SURFACES					X			X			X			X
	UT COMPLETE VOLUME					X			X			X			X
TCX-RCPCPC-03	UT OF BORE & KEYWAY	X	X		X		X	X		X	X		X	X	
	PT EXPOSED SURFACES					X			X			X			X
	UT COMPLETE VOLUME					X			X			X			X
TCX-RCPCPC-04	UT OF BORE & KEYWAY	X	X		X		X	X		X	X		X	X	
	PT EXPOSED SURFACES					X			X			X			X
	UT COMPLETE VOLUME					X			X			X			X

SAFETY INJECTION PUMP SHROUD

Visible linear indications have been found on the shroud that separates and supports the diffuser vanes and return guide vanes on the type pump utilized as the safety injection pump at Comanche Peak Steam Electric Station (CPSES). These indications exceed the designer-permitted 1/16 in. maximum. The pump supplier (Pacific Pumps) has evaluated the significance of these indications and determined they have no adverse affects upon the operability of the pumps (Ref. NUREG-0797 Supplement 12).

Pacific Pumps has proposed a field inspection program which addresses this issue. This program has been supplemented by the NRC and is described in NUREG-0797 Supplement 12.

The program requires a visual and surface examination of the shroud section of the intermediate cover during normal or emergency maintenance at approximately 10-year intervals (pump disassembly solely for this examination is not required). A log of all indications is to be maintained, with indications having a depth greater than 1.0 in. in the radial direction to be reported to Pacific Pumps. Records of the examination shall be maintained in the applicable work order.

Summary Discussion

- a. Governing Document - Supplemental Safety Evaluation Report 12 (NUREG-0797).
- b. Exam Items and Boundaries - Shroud section of the safety injection pumps' intermediate cover.
- c. NDE Method and Schedule - Visual and surface examination during normal or emergency maintenance at approximately 10-year intervals.
- d. Acceptance Criteria - All indications shall be recorded with evaluation being on a case-by-case basis.
- e. Special Reports - All indications exceeding 1.0 in. in the radial direction shall be reported to Pacific Pumps.

AISI PLAN
SI PUMP SHROUD SECTION

TAG #	INTERVAL 1ST	2ND	3RD	4TH	INDICATION NOTED
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TCX-SIAPSI-01

TCX-SIAPSI-02

NOTE: EXAM DATE TO BE INPUT UNDER APPROPRIATE 10-YEAR INTERVAL.

FLUX THIMBLE TUBES

Westinghouse reactors containing bottom mounted instrumentation (BMI) flux thimble tubes have experienced wear due to flow induced vibration in the reactor vessel. These thimble tubes provide a pathway for the neutron flux detectors and extend from the seal table into the fuel assembly area. These tubes are closed within the vessel but open at the seal table. Therefore, these tubes constitute a portion of the reactor coolant system pressure boundary.

In response to this issue, the NRC issued Information Notice 87-44 (9/87), with Supplement (3/88), and Bulletin 88-09 (7/88). Bulletin 88-09 requested an inspection program be implemented to monitor thimble tube performance, with the program to include acceptance criterion, inspection methodology and frequency. Letter TXX-89781 provides a response to this bulletin and describes the intention of TU Electric to comply with the bulletins' requirements.

The augmented inservice inspection shall include a full length examination, within the limitations of probe travel, of all 58 thimble tubes using standard eddy current testing (ET) techniques. Supplementary techniques or methods may be used for further evaluation. These examinations shall be conducted during the first refueling outage with subsequent examinations determined by the results obtained during previous examinations.

Acceptance criteria for this activity is as follows:

$W_a < 80\%$: No action required

$W_a \geq 80\%$: Cap or reposition

Use the following equation to calculate predicted wear:

$$W_a = W_d (N_a/N_d)^n$$

Where:

- N_a = Accumulated time at which wear depth is to be calculated
- N_d = Operating time accumulated before inspection
- W_a = Percent Wear Depth at time N_a
- W_d = Percent Wear Depth at the time of the inspection
- n = 0.67

In accordance with TXX-89781 a special report shall be issued to the NRC within thirty days of completion of thimble tube examinations conducted during the first outage. This report shall describe the tubes examined and the results, as a minimum.

ICR 2

Summary Discussion:

- a. Governing Document - NRC Bulletin 88-09, CPSES-9006199.
- b. Exam Items and Boundaries - All 58 thimble tubes to the extent possible of the full length.
- c. NDE Method and Schedule - ET to be performed on a schedule based upon previous examinations.
- d. Acceptance Criteria - See above discussion based on WCAP 12866.
- e. Special Reports - A special report will be issued to the NRC within 30 days of completion of the thimble tube inspection conducted during the first outage.

ICR 2

<u>TUBE ID</u>	<u>OUTAGE</u>	<u>W%</u>	<u>COMMENTS</u>
A-9	RF01	0	
A-11	RF01	0	
B-3	RF01	0	
B-6	RF01	0	
B-8	RF01	0	
B-13	RF01	0	
C-5	RF01	0	
C-7	RF01	0	
C-8	RF01	0	
D-3	RF01	0	
D-8	RF01	0	
D-10	RF01	0	
D-12	RF01	0	
D-14	RF01	0	
E-5	RF01	0	
E-9	RF01	24	
E-11	RF01	0	
F-1	RF01	0	
F-3	RF01	0	
F-7	RF01	0	
F-8	RF01	0	
F-14	RF01	0	
G-5	RF01	0	
G-9	RF01	0	
G-12	RF01	0	
H-2	RF01	0	
H-3	RF01	0	
H-4	RF01	0	
H-6	RF01	0	
H-11	RF01	35	
H-13	RF01	0	
H-15	RF01	58	
J-1	RF01	0	
J-7	RF01	0	
J-8	RF01	0	
J-10	RF01	0	
J-14	RF01	0	
K-2	RF01	21	
K-6	RF01	0	
K-12	RF01	0	
L-5	RF01	0	
L-8	RF01	0	
L-10	RF01	0	
L-11	RF01	0	
L-13	RF01	0	
L-15	RF01	0	
M-7	RF01	0	
N-2	RF01	0	
N-4	RF01	0	
N-6	RF01	0	
N-8	RF01	0	
N-13	RF01	0	
N-14	RF01	0	
P-4	RF01	0	
P-9	RF01	22	
R-6	RF01	0	
R-8	RF01	0	
R-11	RF01	0	

MAIN STEAM AND FEEDWATER BREAK EXCLUSION PIPING

Main Steam and Feedwater piping located in the safeguards building which has been designated as "break exclusion piping" in FSAR Section 3.6.B, is to be examined in accordance with Auxiliary Systems Branch 3-1 (Ref. FSAR 6.6.8). This shall consist of an ultrasonic examination, to the extent practical, of all circumferential and longitudinal piping welds, except as may be exempted by ASME Section XI. ASME Section XI allows exemption from examination for piping 4" and less.

The augmented inservice inspection shall include all welds and portions thereof which meet the above criteria but which are not selected for examination as delineated in the ASME Section XI Inservice Inspection Plan. These examinations shall be distributed such that each weld or portion thereof is examined once during each 10-year inservice inspection interval.

Examination procedures and personnel shall be in accordance with the rules of ASME Section XI.

No special reports are required for this activity. Records of the examinations shall be maintained with the applicable work order.

Results of these examinations shall be evaluated against the acceptance criteria provided in ASME Section XI, IWC-3000.

Summary Discussion

- a. Governing Document - Auxiliary Systems Branch 3-1, FSAR 6.6.8.
- b. Exam Items and Boundaries - All non-exempt circumferential and longitudinal welds in the Main Steam and Feedwater systems contained within the break exclusion zones, which are not scheduled to be examined as part of the Section XI inservice inspection program.
- c. NDE Method and Schedule - Ultrasonic examination once per 10-year interval. The specific schedule by refueling outage is attached.
- d. Acceptance Criteria - ASME Section XI, IWC-3000.
- e. Special Reports - None

HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

		INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
				FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
SUMMARY EXAMINATION AREA		ASME					INSTRUCTIONS
NUMBER IDENTIFICATION		SEC. XI					
		CATGY MDE					
		ITEM NO METH		1 2	1 2	1 2	**CALIBRATION BLOCK**

MAIN STEAM 32-MS-2-001-1303-2

099200	TCX-2-2100-16 PIPE TO PIPE 877SB	C-F-2 C5.51	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY. **TBX-33**
099250	TCX-2-2100-16L LONG. SEAM 877RB	C-F-2 C5.52	UT	1 X -	- -	- -	100% FROM WELD 16 TO 21. TDLR VERIFICATION BOUNDARY. **TBX-33**

MAIN STEAM MS-25 (DRIP POT)

099400	TCX-2-2100-18 PIPE TO BRANCH CONNECTION 874SB	C-F-2 C5.51	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY. **TBX-22**
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MAIN STEAM 32-MS-2-001-1303-2

099700	TCX-2-2100-21 PIPE TO PIPE 877SB	C-F-2 C5.51	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY. **TBX-33**
099750	TCX-2-2100-21L LONG. SEAM 877SB	C-F-2 C5.52	UT	1 X -	- -	- -	100% FROM WELD 21 TO 25. TDLR VERIFICATION BOUNDARY. **TBX-33**
100100	TCX-2-2100-25 PIPE TO PIPE 877SB	C-F-2 C5.51	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY. **TBX-33**

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HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

SUMMARY EXAMINATION AREA NUMBER IDENTIFICATION	INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
	ASME SEC. XI CATGY NDE ITEM NO METH		FIRST	SECOND	THIRD	INSTRUCTIONS **CALIBRATION BLOCK**
			PERIOD	PERIOD	PERIOD	

			1 2	1 2	1 2	

MAIN STEAM 32-MS-2-001-1303-2

100150 TCX-2-2100-25L C-F-2 UT 1 X - - - 100% FROM WELD 25 TO 26, TDLR
LONG. SEAM C5.52 VERIFICATION BOUNDARY.
877SB
TBX-33

100200 TCX-2-2100-26 C-F-2 UT 1 X - - - TDLR VERIFICATION BOUNDARY.
PIPE TO VALVE C5.51
877SB
TBX-33

MAIN STEAM MS-25 (DRIP POT)

100500 TCX-2-2100-29 C-F-2 UT 1 X - - - TDLR VERIFICATION BOUNDARY.
PIPE TO CAP C5.51
874SB
TBX-22

MAIN STEAM 8-MS-2-257-1303-2

100600 TCX-2-2100-30 C-F-2 UT 1 X - - - TDLR VERIFICATION BOUNDARY.
BRANCH CONNECTION TO PIPE C5.51
878SB
TBX-17

100700 TCX-2-2100-31 C-F-2 UT 1 X - - - TDLR VERIFICATION BOUNDARY.
PIPE TO VALVE C5.51
881SB
TBX-17

100800 TCX-2-2100-32 C-F-2 UT 1 X - - - TDLR VERIFICATION BOUNDARY.
VALVE TO PIPE C5.51
882SB
TBX-17

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HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

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INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
		FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
ASME					
SEC. XI					
CATGY MDE		O U T A G E			INSTRUCTIONS
ITEM NO METH		1 2	1 2	1 2	**CALIBRATION BLOCK**
SUMMARY EXAMINATION AREA					
NUMBER IDENTIFICATION					

MAIN STEAM 8-MS-2-257-1303-2

100900	TCX-2-2100-33 PIPE TO ELBOW 885SB	C-F-2 CS.51	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY.
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TBX-17

101000	TCX-2-2100-34 ELBOW TO PIPE 885SB	C-F-2 CS.51	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY.
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TBX-17

101100	TCX-2-2100-35 PIPE TO VALVE 885SB	C-F-2 CS.51	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY.
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TBX-17

MAIN STEAM 6-2003-2

101200	TCX-2-2100-36 BRANCH CONNECTION TO FLANGE 878SB	C-F-2 CS.51	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY.
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TBX-36

101300	TCX-2-2100-37 BRANCH CONNECTION TO FLANGE 878SB	C-F-2 CS.51	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY.
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TBX-36

101400	TCX-2-2100-38 BRANCH CONNECTION TO FLANGE 873SB	C-F-2 CS.51	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY.
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TBX-36

101500	TCX-2-2100-39 BRANCH CONNECTION TO FLANGE 878SB	C-F-2 CS.51	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY.
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TBX-36

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HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

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SUMMARY EXAMINATION AREA NUMBER IDENTIFICATION	INSPECTION INTERVAL ASME SEC. XI CATGY NDE ITEM NO METH	PLAN STATUS			PRESERVICE YEAR	INSTRUCTIONS **CALIBRATION BLOCK**
		FIRST PERIOD	SECOND PERIOD	THIRD PERIOD		
		1 2	1 2	1 2		

MAIN STEAM 6-2003-2

101600 TCX-2-2100-40 C-F-2 UT 1 X - - - TDLR VERIFICATION BOUNDARY.
BRANCH CONNECTION TO FLANGE C5.51
878SB
TBX-36

FEEDWATER 18-FW-2-019-1303-2

102800 TCX-2-2101-12 C-F-2 UT 1 X - - - TDLR VERIFICATION BOUNDARY.
PIPE TO PIPE C5.51
856SB
TBX-21

102900 TCX-2-2101-13 C-F-2 UT 1 X - - - TDLR VERIFICATION BOUNDARY.
PIPE TO PIPE C5.51
856SB
TBX-24

FEEDWATER 18-FW-2-036-2003-2

103100 TCX-2-2101-15 C-F-2 UT 1 X - - -
VALVE TO PIPE C5.51
856SB
TBX-28

103200 TCX-2-2101-16 C-F-2 UT 1 X - - -
PIPE TO VALVE C5.51
856SB
TBX-38

103300 TCX-2-2101-17 C-F-2 UT 1 X - - -
VALVE TO PIPE C5.51
856SB
TBX-38

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HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

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INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
		FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
ASME					
SEC. XI					
CATGY NDE		O U T A G E			INSTRUCTIONS
ITEM NO METH		1 2	1 2	1 2	**CALIBRATION BLOCK**

FEEDWATER 18-FW-2-036-2003-2

103400	TCX-2-2101-18	C-F-2	UT	1 X -	- -	- -	
	PIPE TO MOMENT RESTRAINT	C5.51					
	856SB						**TBX-38**

FEEDWATER 6-FW-2-095-1303-2

108500	TCX-2-2103-10	C-F-2	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY.
	PIPE TO PIPE	C5.51					
	864SB						**TBX-35**

108600	TCX-2-2103-11	C-F-2	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY.
	ELBOW TO PIPE	C5.51					
	864SB						**TBX-35**

108700	TCX-2-2103-12	C-F-2	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY.
	PIPE TO ELBOW	C5.51					
	864SB						**TBX-35**

108800	TCX-2-2103-13	C-F-2	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY.
	ELBOW TO PIPE	C5.51					
	864SB						**TBX-35**

108900	TCX-2-2103-14	C-F-2	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY.
	PIPE TO ELBOW	C5.51					
	865SB						**TBX-35**

109000	TCX-2-2103-15	C-F-2	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY.
	ELBOW TO PIPE	C5.51					
	868SB						**TBX-35**

HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

SUMMARY EXAMINATION AREA NUMBER IDENTIFICATION	INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
	ASME SEC. XI CATGY NDE ITEM NO METH		FIRST	SECOND	THIRD	
			PERIOD	PERIOD	PERIOD	
			1 2	1 2	1 2	
			O U T A G E			INSTRUCTIONS
						CALIBRATION BLOCK

FEEDWATER 6-FW-2-095-1303-2

109100	TCX-2-2103-16 PIPE TO ELBOW 869SB	C-F-2 CS.51	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY. **TBX-35**
109200	TCX-2-2103-17 ELBOW TO PIPE 869SB	C-F-2 CS.51	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY. **TBX-35**
109300	TCX-2-2103-18 PIPE TO ELBOW 868SB	C-F-2 CS.51	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY. **TBX-35**
109400	TCX-2-2103-19 ELBOW TO PIPE 863SB	C-F-2 CS.51	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY. **TBX-35**
109500	TCX-2-2103-20 PIPE TO ELBOW 862SB	C-F-2 CS.51	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY. **TBX-35**
109600	TCX-2-2103-21 TEE TO PIPE 862SB	C-F-2 CS.51	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY. **TBX-35**
109700	TCX-2-2103-22 PIPE TO TEE 862SB	C-F-2 CS.51	UT	1 X -	- -	- -	TDLR VERIFICATION BOUNDARY. **TBX-35**

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HIGH ENERGY LINE BREAK UNIT 2
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SUMMARY EXAMINATION AREA NUMBER IDENTIFICATION	INSPECTION INTERVAL ASME SEC. XI CATGY NDE ITEM NO METH	PLAN STATUS			PRESERVICE YEAR	INSTRUCTIONS **CALIBRATION BLOCK**
		FIRST PERIOD	SECOND PERIOD	THIRD PERIOD		
		1 2	1 2	1 2		

FEEDWATER 6-FW-2-095-1303-2

109800 TCX-2-2103-23 VALVE TO PIPE 862SB C-F-2 UT 1 X - - - - - TDLR VERIFICATION BOUNDARY.
C5.51
TBX-35

110000 TCX-2-2103-25 PIPE TO PIPE 862SB C-F-2 UT 1 X - - - - - TDLR VERIFICATION BOUNDARY.
C5.51
TBX-35

FEEDWATER 6-FW-2-091-2003-2

11100 TCX-2-2103-26 VALVE TO PIPE 862SB C-F-2 UT 1 X - - - - - TDLR VERIFICATION BOUNDARY.
C5.51
TBX-34

110200 TCX-2-2103-27 PIPE TO VALVE 862SB C-F-2 UT 1 X - - - - -
C5.51
TBX-34

110300 TCX-2-2103-28 ELBOW TO PIPE 862SB C-F-2 UT 1 X - - - - -
C5.51
TBX-34

110400 TCX-2-2103-29 PIPE TO ELBOW 862SB C-F-2 UT 1 X - - - - -
C5.51
TBX-34

110500 TCX-2-2103-30 ELBOW TO PIPE 862SB C-F-2 UT 1 X - - - - -
C5.51
TBX-34

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HIGH ENERGY LINE BREAK UNIT 2
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SUMMARY EXAMINATION AREA NUMBER IDENTIFICATION		INSPECTION INTERVAL ASME SEC. XI CATGY WDE ITEM NO METH		PLAN STATUS			PRESERVICE YEAR	INSTRUCTIONS **CALIBRATION BLOCK**	
				FIRST PERIOD	SECOND PERIOD	THIRD PERIOD			
				1 2	1 2	1 2			
<hr/>									
<u>FEEDWATER 6-FW-2-091-2003-2</u>									
110600	TCX-2-2103-31 PIPE TO ELBOW 861SB	C-F-2 C5.51	UT	1 X -	- -	- -		**TBX-34**	
110700	TCX-2-2103-32 VALVE TO PIPE 861SB	C-F-2 C5.51	UT	1 X -	- -	- -		**TBX-34**	
110800	TCX-2-2103-33 PIPE TO VALVE 860SB	C-F-2 C5.51	UT	1 X -	- -	- -		**TBX-34**	
<u>MAIN STEAM 32-MS-2-002-1303-2</u>									
112900	TCX-2-2200-19 PIPE TO PIPE 877SB	C-F-2 C5.51	UT	1 - -	X -	- -		TDLR VERIFICATION BOUNDARY. **TBX-33**	
112950	TCX-2-2200-19L LONG. SEAM 877SB	C-F-2 C5.52	UT	1 - -	X -	- -		100% FROM WELD 19 TO 23. TDLR VERIFICATION BOUNDARY. **TBX-33**	
113300	TCX-2-2200-23 PIPE TO PIPE 877SB	C-F-2 C5.51	UT	1 - -	X -	- -		TDLR VERIFICATION BOUNDARY. **TBX-33**	
113550	TCX-2-2200-23L LONG. SEAM 877SB	C-F-2 C5.52	UT	1 - -	X -	- -		100% FROM WELD 23 TO 27. TDLR VERIFICATION BOUNDARY. **TBX-33**	

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HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

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		INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
				FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
ASME							
SEC. XI							
CATGY NDE				- - - - -	O U T A G E	- - - - -	INSTRUCTIONS
ITEM NO METH				1 2	1 2	1 2	**CALIBRATION BLOCK**
SUMMARY EXAMINATION AREA							
NUMBER IDENTIFICATION							

MAIN STEAM 32-MS-2-002-1303-2

113700	TCX-2-2200-27 PIPE TO PIPE 877SB	C-F-2 C5.51	UT	1 - -	X -	- -	TDLR VERIFICATION BOUNDARY. **TBX-33**
113750	TCX-2-2200-27L LONG. SEAM 877SB	C-F-2 C5.52	UT	1 - -	X -	- -	100% FROM WELD 27 TO 28. TDLR VERIFICATION BOUNDARY. **TBX-33**
113800	TCX-2-2200-28 PIPE TO VALVE 877SB	C-F-2 C5.51	UT	1 - -	X -	- -	TDLR VERIFICATION BOUNDARY. **TBX-33**

MAIN STEAM 8-MS-2-240-1303-2

114000	TCX-2-2200-30 BRANCH CONNECTION TO PIPE 878SB	C-F-2 C5.51	UT	1 - -	X -	- -	TDLR VERIFICATION BOUNDARY. **TBX-17**
114100	TCX-2-2200-31 PIPE TO VALVE 881SB	C-F-2 C5.51	UT	1 - -	X -	- -	TDLR VERIFICATION BOUNDARY. **TBX-17**
114200	TCX-2-2200-32 VALVE TO PIPE 883SB	C-F-2 C5.51	UT	1 - -	X -	- -	TDLR VERIFICATION BOUNDARY. **TBX-17**
114400	TCX-2-2200-34 ELBOW TO PIPE 885SB	C-F-2 C5.51	UT	1 - -	X -	- -	TDLR VERIFICATION BOUNDARY. **TBX-17**

HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
		FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
ASME					
SEC. XI					
CATGY	NDE	O U T A G E			INSTRUCTIONS
ITEM NO	METH	1 2	1 2	1 2	**CALIBRATION BLOCK**
SUMMARY EXAMINATION AREA					
NUMBER IDENTIFICATION					

MAIN STEAM 8-MS-2-240-1303-2

114500	TCX-2-2200-35 PIPE TO VALVE 885S8	C-F-2 C5.51	UT	1 - -	X -	- -	TDLR VERIFICATION BOUNDARY. **TBX-17**
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MAIN STEAM 6-2003-2

114700	TCX-2-2200-37 BRANCH CONNECTION TO FLANGE 878S8	C-F-2 C5.51	UT	1 - -	X -	- -	TDLR VERIFICATION BOUNDARY. **TBX-36**
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114800	TCX-2-2200-38 BRANCH CONNECTION TO FLANGE 878S8	C-F-2 C5.51	UT	1 - -	X -	- -	TDLR VERIFICATION BOUNDARY. **TBX-36**
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114900	TCX-2-2200-39 BRANCH CONNECTION TO FLANGE 878S8	C-F-2 C5.51	UT	1 - -	X -	- -	TDLR VERIFICATION BOUNDARY. **TBX-36**
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115000	TCX-2-2200-40 BRANCH CONNECTION TO FLANGE 878S8	C-F-2 C5.51	UT	1 - -	X -	- -	TDLR VERIFICATION BOUNDARY. **TBX-36**
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MAIN STEAM MS-24 (DRIP POT)

115200	TCX-2-2200-66 BRANCH CONNECTION TO PIPE 876S8	C-F-2 C5.51	UT	1 - -	X -	- -	TDLR VERIFICATION BOUNDARY. **TBX-22**
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HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

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		INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
				FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
SUMMARY EXAMINATION AREA		ASME					INSTRUCTIONS
		SEC. XI					
NUMBER IDENTIFICATION		CATGY NDE					
		ITEM NO METH		1 2	1 2	1 2	**CALIBRATION BLOCK**

MAIN STEAM MS-24 (DRIP POT)

115300	TCX-2-2200-67 PIPE TO CAP 874SB	C-F-2 C5.51	UT	1 - -	X -	- -	TDLR VERIFICATION BOUNDARY. **TBX-22**
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FEEDWATER 18-FW-2-035-2003-2

118000	TCX-2-2202-1 MOMENT RESTRAINT TO PIPE 856SB	C-F-2 C5.51	UT	1 - X	- -	- -	 **TBX-38**
118100	TCX-2-2202-2 PIPE TO VALVE 856SB	C-F-2 C5.51	UT	1 - X	- -	- -	 **TBX-38**
118200	TCX-2-2202-3 VALVE TO PIPE 856SB	C-F-2 C5.51	UT	1 - X	- -	- -	 **TBX-38**
118300	TCX-2-2202-4 PIPE TO VALVE 856SB	C-F-2 C5.51	UT	1 - X	- -	- -	 **TBX-38**
118400	TCX-2-2202-5 VALVE TO PIPE 856SB	C-F-2 C5.51	UT	1 - X	- -	- -	TDLR VERIFICATION BOUNDARY. **TBX-38**

FEEDWATER 18-FW-2-010-1303-2

9500	TCX-2-2202-6 PIPE TO PIPE 856SB	C-F-2 C5.51	UT	1 - X	- -	- -	TDLR VERIFICATION BOUNDARY. **TBX-21**
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HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

		INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
				FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
SUMMARY EXAMINATION AREA		ASME					
NUMBER IDENTIFICATION		SEC. XI					
		CATGY NDE		- - - - -	O U T A G E	- - - - -	INSTRUCTIONS
		ITEM NO METH		1 2	1 2	1 2	**CALIBRATION BLOCK**

FEEDWATER 18-FW-2-018-1303-2

118600	TCX-2-2202-7	C-F-2	UT	1 - X	- -	- -	TDLR VERIFICATION BOUNDARY.
	PIPE TO PIPE	C5.51					
	856SB						**TBX-21**

FEEDWATER 6-FW-2-092-2003-2

122000	TCX-2-2204-2	C-F-2	UT	1 - X	- -	- -	
	BRANCH CONNECTION TO PIPE	C5.51					
	857SB						**TBX-34**

122100	TCX-2-2204-3	C-F-2	UT	1 - X	- -	- -	
	PIPE TO VALVE	C5.51					
	860SB						**TBX-34**

122200	TCX-2-2204-4	C-F-2	UT	1 - X	- -	- -	
	VALVE TO PIPE	C5.51					
	861SB						**TBX-34**

122300	TCX-2-2204-5	C-F-2	UT	1 - X	- -	- -	
	PIPE TO ELBOW	C5.51					
	862SB						**TBX-34**

122500	TCX-2-2204-7	C-F-2	UT	1 - X	- -	- -	
	PIPE TO ELBOW	C5.51					
	863SB						**TBX-34**

122600	TCX-2-2204-8	C-F-2	UT	1 - X	- -	- -	
	ELBOW TO PIPE	C5.51					
	863SB						**TBX-34**

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HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

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INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
		FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
ASME					
SEC. XI					
CATGY	NDE	O U T A G E			INSTRUCTIONS
ITEM NO	METH	1 2	1 2	1 2	**CALIBRATION BLOCK**

FEEDWATER 6-FW-2-092-2003-2

122700	TCX-2-2204-9 PIPE TO VALVE 863SB	C-F-2 CS.51	UT	1 - X	- -	- -	**TBX-34**
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FEEDWATER 6-FW-2-096-1303-2

122900	TCX-2-2204-11 PIPE TO PIPE 863SB	C-F-2 CS.51	UT	1 - X	- -	- -	TDLR VERIFICATION BOUNDARY. **TBX-35**
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123000	TCX-2-2204-12 PIPE TO VALVE 863SB	C-F-2 CS.51	UT	1 - X	- -	- -	TDLR VERIFICATION BOUNDARY. **TBX-35**
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123100	TCX-2-2204-13 VALVE TO PIPE 863SB	C-F-2 CS.51	UT	1 - X	- -	- -	TDLR VERIFICATION BOUNDARY. **TBX-35**
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123200	TCX-2-2204-14 PIPE TO TEE 863SB	C-F-2 CS.51	UT	1 - X	- -	- -	TDLR VERIFICATION BOUNDARY. **TBX-35**
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123300	TCX-2-2204-15 TEE TO PIPE 863SB	C-F-2 CS.51	UT	1 - X	- -	- -	TDLR VERIFICATION BOUNDARY. **TBX-35**
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123500	TCX-2-2204-17 ELBOW TO PIPE 863SB	C-F-2 CS.51	UT	1 - X	- -	- -	TDLR VERIFICATION BOUNDARY. **TBX-35**
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HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

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INSPECTION INTERVAL				PLAN STATUS			PRESERVICE YEAR
				FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
ASME SEC. XI				-----			
CATGY NDE				O U T A G E			INSTRUCTIONS
SUMMARY EXAMINATION AREA	NUMBER	IDENTIFICATION	ITEM NO METH	1 2	1 2	1 2	**CALIBRATION BLOCK**

FEEDWATER 6-FW-2-096-1303-2							
123600	TCX-2-2204-18		C-F-2 UT	1 - X	- -	- -	TDLR VERIFICATION BOUNDARY.
	PIPE TO ELBOW		C5.51				
	868SB						**TBX-35**
123700	TCX-2-2204-19		C-F-2 UT	1 - X	- -	- -	TDLR VERIFICATION BOUNDARY.
	ELBOW TO PIPE		C5.51				
	870SB						**TBX-35**
123800	TCX-2-2204-20		C-F-2 UT	1 - X	- -	- -	TDLR VERIFICATION BOUNDARY.
	PIPE TO ELBOW		C5.51				
	870SB						**TBX-35**
123900	TCX-2-2204-21		C-F-2 UT	1 - X	- -	- -	TDLR VERIFICATION BOUNDARY.
	ELBOW TO PIPE		C5.51				
	868SB						**TBX-35**
124000	TCX-2-2204-22		C-F-2 UT	1 - X	- -	- -	TDLR VERIFICATION BOUNDARY.
	PIPE TO ELBOW		C5.51				
	865SB						**TBX-35**
124100	TCX-2-2204-23		C-F-2 UT	1 - X	- -	- -	TDLR VERIFICATION BOUNDARY.
	ELBOW TO PIPE		C5.51				
	864SB						**TBX-35**
124200	TCX-2-2204-24		C-F-2 UT	1 - X	- -	- -	TDLR VERIFICATION BOUNDARY.
	PIPE TO ELBOW		C5.51				
	864SB						**TBX-35**

		INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
		ASME		FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
		SEC. XI		-----			
SUMMARY EXAMINATION AREA		CATGY	NDE	O U T A G E			INSTRUCTIONS
NUMBER	IDENTIFICATION	ITEM NO	METH	1	2	1	2
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<u>FEEDWATER 6-FW-2-096-1303-2</u>							
124300	TCX-2-2204-25 ELBOW TO PIPE 864SB	C-F-2 C5.51	UT	1 - X	- -	- -	TDLR VERIFICATION BOUNDARY. **TBX-35**
124400	TCX-2-2204-26 PIPE TO PIPE 864SB	C-F-2 C5.51	UT	1 - X	- -	- -	TDLR VERIFICATION BOUNDARY. **TBX-35**
<u>MAIN STEAM 32-MS-2-003-1303-2</u>							
129700	TCX-2-2300-18 PIPE TO PIPE 877SB	C-F-2 C5.51	UT	1 - -	- X	- -	TDLR VERIFICATION BOUNDARY. **TBX-33**
129750	TCX-2-2300-18L LONG. SEAM 877SB	C-F-2 C5.52	UT	1 - -	- X	- -	100% FROM WELD 18 TO 22. TDLR VERIFICATION BOUNDARY. **TBX-33**
130100	TCX-2-2300-22 PIPE TO PIPE 877SB	C-F-2 C5.51	UT	1 - -	- X	- -	TDLR VERIFICATION BOUNDARY. **TBX-33**
130150	TCX-2-2300-22L LONG. SEAM 877SB	C-F-2 C5.52	UT	1 - -	- X	- -	100% FROM WELD 22 TO 26. TDLR VERIFICATION BOUNDARY. **TBX-33**
130500	TCX-2-2300-26 PIPE TO PIPE 877SB	C-F-2 C5.51	UT	1 - -	- X	- -	TDLR VERIFICATION BOUNDARY. **TBX-33**

HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

		INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
				FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
SUMMARY EXAMINATION AREA		ASME					
NUMBER IDENTIFICATION		SEC. XI					
		CATGY NDE					INSTRUCTIONS
		ITEM NO METH		1 2	1 2	1 2	**CALIBRATION BLOCK**

MAIN STEAM 32-MS-2-003-1303-2

130550	TCX-2-2300-26L LONG. SEAM 877S8	C-F-2 C5.52	UT	1 - -	- X	- -	100% FROM WELD 26 TO 27. TDLR VERIFICATION BOUNDARY. **TBX-33**
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130600	TCX-2-2300-27 PIPE TO VALVE 877S8	C-F-2 C5.51	UT	1 - -	- X	- -	TDLR VERIFICATION BOUNDARY. **TBX-33**
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130700	TCX-2-2300-28 VALVE TO MOMENT RESTRAINT 877S8	C-F-2 C5.51	UT	1 - -	- X	- -	**TBX-33**
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MAIN STEAM MS-23 (DRIP POT)

130900	TCX-2-2300-30 PIPE TO CAP 873S8	C-F-2 C5.51	UT	1 - -	- X	- -	TDLR VERIFICATION BOUNDARY. **TBX-22**
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MAIN STEAM 8-MS-2-223-1303-2

131100	TCX-2-2300-32 PIPE TO VALVE 880S8	C-F-2 C5.51	UT	1 - -	- X	- -	TDLR VERIFICATION BOUNDARY. **TBX-17**
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131200	TCX-2-2300-33 VALVE TO PIPE 883S8	C-F-2 C5.51	UT	1 - -	- X	- -	TDLR VERIFICATION BOUNDARY. **TBX-17**
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HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

		INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
				FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
SUMMARY EXAMINATION AREA		ASME					
		SEC. XI					
		CATGY	NDE	- - - - -	O U T A G E	- - - - -	INSTRUCTIONS
NUMBER	IDENTIFICATION	ITEM NO	METH	1 2	1 2	1 2	**CALIBRATION BLOCK**

MAIN STEAM 8-MS-2-223-1303-2

131300	TCX-2-2300-34 PIPE TO ELBOW 884SB	C-F-2 C5.51	UT	1 - -	- X	- -	TDLR VERIFICATION BOUNDARY.
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TBX-17

131400	TCX-2-2300-35 ELBOW TO PIPE 885SB	C-F-2 C5.51	UT	1 - -	- X	- -	TDLR VERIFICATION BOUNDARY.
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TBX-17

131500	TCX-2-2300-36 PIPE TO VALVE 885SB	C-F-2 C5.51	UT	1 - -	- X	- -	TDLR VERIFICATION BOUNDARY.
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TBX-17

MAIN STEAM 6-2003-2

131600	TCX-2-2300-37 BRANCH CONNECTION TO FLANGE 878SB	C-F-2 C5.51	UT	1 - -	- X	- -	TDLR VERIFICATION BOUNDARY.
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TBX-36

131700	TCX-2-2300-38 BRANCH CONNECTION TO FLANGE 878SB	C-F-2 C5.51	UT	1 - -	- X	- -	TDLR VERIFICATION BOUNDARY.
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TBX-36

131800	TCX-2-2300-39 BRANCH CONNECTION TO FLANGE 878SB	C-F-2 C5.51	UT	1 - -	- X	- -	TDLR VERIFICATION BOUNDARY.
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TBX-36

131900	TCX-2-2300-40 BRANCH CONNECTION TO FLANGE 878SB	C-F-2 C5.51	UT	1 - -	- X	- -	TDLR VERIFICATION BOUNDARY.
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TBX-36

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HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

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INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
		FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
ASME					
SEC. XI					
CATGY	NDE	O U T A G E			INSTRUCTIONS
ITEM NO	METH	1 2	1 2	1 2	**CALIBRATION BLOCK**
SUMMARY EXAMINATION AREA					
NUMBER	IDENTIFICATION				

MAIN STEAM MS-23 (DRIP POT)

132100	TCX-2-2300-62	C-F-2	UT	1 - -	- X	- -	TDLR VERIFICATION BOUNDARY.
	PIPE TO PIPE	C5.51					
	873SB						**TBX-22**

FEEDWATER 18-FW-2-017-1303-2

134800	TCX-2-2301-27	C-F-2	UT	1 - -	- X	- -	TDLR VERIFICATION BOUNDARY.
	PIPE TO PIPE	C5.51					
	856SB						**TBX-21**

134900	TCX-2-2301-28	C-F-2	UT	1 - -	- X	- -	TDLR VERIFICATION BOUNDARY.
	PIPE TO PIPE	C5.51					
	856SB						**TBX-21**

FEEDWATER 18-FW-2-034-2003-2

135000	TCX-2-2301-29	C-F-2	UT	1 - -	- X	- -	TDLR VERIFICATION BOUNDARY.
	PIPE TO VALVE	C5.51					
	856SB						**TBX-38**

135100	TCX-2-2301-30	C-F-2	UT	1 - -	- X	- -	
	VALVE TO PIPE	C5.51					
	856SB						**TBX-38**

135200	TCX-2-2301-31	C-F-2	UT	1 - -	- X	- -	
	PIPE TO VALVE	C5.51					
	856SB						**TBX-38**

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HIGH ENERGY LINE BREAK UNIT 2
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CLASS 2 SCHEDULED COMPONENTS

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		INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
		ASME		FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
		SEC. XI		-----			
SUMMARY EXAMINATION AREA		CATGY	NDE	- - - - - O U T A G E - - - - -			INSTRUCTIONS
NUMBER IDENTIFICATION		ITEM NO	METH	1 2	1 2	1 2	**CALIBRATION BLOCK**
				-----			-----

FEEDWATER 18-FW-2-034-2003-2

135300	TCX-2-2301-32 VALVE TO PIPE 856SB	C-F-2 C5.51	UT	1 - -	- X	- -	**TBX-38**
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135400	TCX-2-2301-33 PIPE TO MOMENT RESTRAINT 856SB	C-F-2 C5.51	UT	1 - -	- X	- -	**TBX-38**
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FEEDWATER 6-FW-2-093-2003-2

138700	TCX-2-2303-2 BRANCH CONNECTION TO PIPE 856SB	C-F-2 C5.51	UT	1 - -	- X	- -	**TBX-34**
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138800	TCX-2-2303-3 PIPE TO VALVE 858SB	C-F-2 C5.51	UT	1 - -	- X	- -	**TBX-34**
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138900	TCX-2-2303-4 VALVE TO PIPE 859SB	C-F-2 C5.51	UT	1 - -	- X	- -	**TBX-34**
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139000	TCX-2-2303-5 PIPE TO ELBOW 862SB	C-F-2 C5.51	UT	1 - -	- X	- -	**TBX-34**
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139200	TCX-2-2303-7 PIPE TO ELBOW 863SB	C-F-2 C5.51	UT	1 - -	- X	- -	**TBX-34**
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HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
		FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
ASME					
SEC. XI					
CATGY MDE		- - - - - O U T A G E - - - - -			INSTRUCTIONS
ITEM NO METH		1 2	1 2	1 2	**CALIBRATION BLOCK**

FEEDWATER 6-FW-2-093-2003-2

139300	TCX-2-2303-8 ELBOW TO PIPE 863SB	C-F-2 C5.51	UT	1 - -	- X - -	**TBX-34**
139400	TCX-2-2303-9 PIPE TO VALVE 863SB	C-F-2 C5.51	UT	1 - -	- X - -	**TBX-34**
139500	TCX-2-2303-10 VALVE TO PIPE 863SB	C-F-2 C5.51	UT	1 - -	- X - -	TDLR VERIFICATION BOUNDARY. **TBX-34**

FEEDWATER 6-FW-2-097-1303-2

139600	TCX-2-2303-11 PIPE TO PIPE 863SB	C-F-2 C5.51	UT	1 - -	- X - -	TDLR VERIFICATION BOUNDARY. **TBX-35**
139800	TCX-2-2303-13 VALVE TO PIPE 863SB	C-F-2 C5.51	UT	1 - -	- X - -	TDLR VERIFICATION BOUNDARY. **TBX-35**
139900	TCX-2-2303-14 PIPE TO TEE 863SB	C-F-2 C5.51	UT	1 - -	- X - -	TDLR VERIFICATION BOUNDARY. **TBX-35**
140000	TCX-2-2303-15 TEE TO PIPE 863SB	C-F-2 C5.51	UT	1 - -	- X - -	TDLR VERIFICATION BOUNDARY. **TBX-35**

HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

		INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR	
		ASME		FIRST PERIOD	SECOND PERIOD	THIRD PERIOD		
		SEC. XI		-----				
SUMMARY EXAMINATION AREA		CATGY	NDE	O U T A G E			INSTRUCTIONS	
NUMBER	IDENTIFICATION	ITEM NO	METH	1	2	1	2	**CALIBRATION BLOCK**
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FEEDWATER 6-FW-2-097-1303-2								
140100	TCX-2-2303-16 PIPE TO ELBOW 863SB	C-F-2 C5.51	UT	1	-	-	X	TDLR VERIFICATION BOUNDARY. **TBX-35**
140200	TCX-2-2303-17 ELBOW TO PIPE 864SB	C-F-2 C5.51	UT	1	-	-	X	TDLR VERIFICATION BOUNDARY. **TBX-35**
140300	TCX-2-2303-18 PIPE TO PIPE 766SB	C-F-2 C5.51	UT	1	-	-	X	TDLR VERIFICATION BOUNDARY. **TBX-35**
140400	TCX-2-2303-19 PIPE TO ELBOW 869SB	C-F-2 C5.51	UT	1	-	-	X	TDLR VERIFICATION BOUNDARY. **TBX-35**
140500	TCX-2-2303-20 ELBOW TO PIPE 870SB	C-F-2 C5.51	UT	1	-	-	X	TDLR VERIFICATION BOUNDARY. **TBX-35**
140600	TCX-2-2303-21 PIPE TO ELBOW 870SB	C-F-2 C5.51	UT	1	-	-	X	TDLR VERIFICATION BOUNDARY. **TBX-35**
140700	TCX-2-2303-22 ELBOW TO PIPE 869SB	C-F-2 C5.51	UT	1	-	-	X	TDLR VERIFICATION BOUNDARY. **TBX-35**

HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
		FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
ASME					
SEC. XI					
CATGY NDE		O U T A G E			INSTRUCTIONS
ITEM NO METH		1 2	1 2	1 2	**CALIBRATION BLOCK**
SUMMARY EXAMINATION AREA					
NUMBER IDENTIFICATION					

FEEDWATER 6-FW-2-097-1303-2

140800	TCX-2-2303-23 PIPE TO ELBOW 865SB	C-F-2 C5.51	UT	1 - -	- X - -	TDLR VERIFICATION BOUNDARY. **TBX-35**
140900	TCX-2-2303-24 ELBOW TO PIPE 864SB	C-F-2 C5.51	UT	1 - -	- X - -	TDLR VERIFICATION BOUNDARY. **TBX-35**
141100	TCX-2-2303-26 ELBOW TO PIPE 864SB	C-F-2 C5.51	UT	1 - -	- X - -	TDLR VERIFICATION BOUNDARY. **TBX-35**
141200	TCX-2-2303-27 PIPE TO PIPE 864SB	C-F-2 C5.51	UT	1 - -	- X - -	TDLR VERIFICATION BOUNDARY. **TBX-35**
144920	TCX-2-2303-65 PIPE TO PIPE 864SB	C-F-2 C5.51	UT	1 - -	- X - -	TDLR VERIFICATION BOUNDARY. **TBX-35**
144940	TCX-2-2303-66 PIPE TO PIPE 864SB	C-F-2 C5.51	UT	1 - -	- X - -	TDLR VERIFICATION BOUNDARY. **TBX-35**

MAIN STEAM 32-MS-2-004-1303-2

146600	TCX-2-2400-17 PIPE TO PIPE 877SB	C-F-2 C5.51	UT	1 - -	- - - X	TDLR VERIFICATION BOUNDARY. **TBX-33**
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HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

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INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
		FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
ASME					
SEC. XI					
CATGY NDE		- - - - - O U T A G E - - - - -			INSTRUCTIONS
ITEM NO METH		1 2	1 2	1 2	**CALIBRATION BLOCK**

MAIN STEAM 32-MS-2-004-1303-2					
146650	TCX-2-2400-17L LONG. SEAM 877SB	C-F-2 C5.52	UT	1 - - - - -	100% FROM WELD 17 TO 19. TDLR VERIFICATION BOUNDARY. **TBX-33**
146800	TCX-2-2400-19 PIPE TO PIPE 877SB	C-F-2 C5.51	UT	1 - - - - -	TDLR VERIFICATION BOUNDARY. **TBX-33**
146850	TCX-2-2400-19L LONG. SEAM 877SB	C-F-2 C5.52	UT	1 - - - - -	100% FROM WELD 19 TO 25. TDLR VERIFICATION BOUNDARY. **TBX-33**
147400	TCX-2-2400-25 PIPE TO PIPE 877SB	C-F-2 C5.51	UT	1 - - - - -	TDLR VERIFICATION BOUNDARY. **TBX-33**
147450	TCX-2-2400-25L LONG. SEAM 877SB	C-F-2 C5.52	UT	1 - - - - -	100% FROM WELD 25 TO 56. TDLR VERIFICATION BOUNDARY. **TBX-33**
147550	TCX-2-2400-26L LONG. SEAM 877SB	C-F-2 C5.52	UT	1 - - - - -	92 SELECTED FOR ISI. 100% FROM WELD 56 TO 26. TDLR VERIFICATION BOUNDARY. **TBX-33**
147600	TCX-2-2400-27 VALVE TO MOMENT RESTRAINT 877SB	C-F-2 C5.51	UT	1 - - - - -	 **TBX-33**

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HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

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		INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
				FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
SUMMARY EXAMINATION AREA		ASME					
		SEC. XI					
		CATGY	NDE	O U T A G E			INSTRUCTIONS
NUMBER	IDENTIFICATION	ITEM NO	METH	1 2	1 2	1 2	**CALIBRATION BLOCK**

MAIN STEAM MS-26 (DRIP POT)

147800	TCX-2-2400-29 PIPE TO CAP 874SB	C-F-2 C5.51	UT	1 - -	- -	- X	TDLR VERIFICATION BOUNDARY. **TBX-22**
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MAIN STEAM 8-MS-2-274-1303-2

147900	TCX-2-2400-30 BRANCH CONNECTION TO PIPE 878SB	C-F-2 C5.51	UT	1 - -	- -	- X	TDLR VERIFICATION BOUNDARY. **TBX-17**
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148000	TCX-2-2400-31 PIPE TO VALVE 878SB	C-F-2 C5.51	UT	1 - -	- -	- X	TDLR VERIFICATION BOUNDARY. **TBX-17**
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148100	TCX-2-2400-32 VALVE TO PIPE 879SB	C-F-2 C5.51	UT	1 - -	- -	- X	TDLR VERIFICATION BOUNDARY. **TBX-17**
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148200	TCX-2-2400-33 PIPE TO ELBOW 884SB	C-F-2 C5.51	UT	1 - -	- -	- X	TDLR VERIFICATION BOUNDARY. **TBX-17**
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148300	TCX-2-2400-34 ELBOW TO PIPE 885SB	C-F-2 C5.51	UT	1 - -	- -	- X	TDLR VERIFICATION BOUNDARY. **TBX-17**
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148400	TCX-2-2400-35 PIPE TO VALVE 885SB	C-F-2 C5.51	UT	1 - -	- -	- X	TDLR VERIFICATION BOUNDARY. **TBX-17**
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HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

SUMMARY EXAMINATION AREA NUMBER IDENTIFICATION	INSPECTION INTERVAL ASME SEC. XI CATGY NDE ITEM NO METH	PLAN STATUS			PRESERVICE YEAR	INSTRUCTIONS
		FIRST PERIOD	SECOND PERIOD	THIRD PERIOD		
		- - - - -	O U T A G E	- - - - -		**CALIBRATION BLOCK**
		1 2	1 2	1 2		

MAIN STEAM 6-2003-2

148500	TCX-2-2400-36 BRANCH CONNECTION TO FLANGE 879SB	C-F-2 C5.51	UT	1 - -	- -	- X	TDLR VERIFICATION BOUNDARY. **TBX-36**
148600	TCX-2-2400-37 BRANCH CONNECTION TO FLANGE 879SB	C-F-2 C5.51	UT	1 - -	- -	- X	TDLR VERIFICATION BOUNDARY. **TBX-36**
148700	TCX-2-2400-38 BRANCH CONNECTION TO FLANGE 879SB	C-F-2 C5.51	UT	1 - -	- -	- X	TDLR VERIFICATION BOUNDARY. **TBX-36**
148800	TCX-2-2400-39 BRANCH CONNECTION TO FLANGE 879SB	C-F-2 C5.51	UT	1 - -	- -	- X	TDLR VERIFICATION BOUNDARY. **TBX-36**
148900	TCX-2-2400-40 BRANCH CONNECTION TO FLANGE 879SB	C-F-2 C5.51	UT	1 - -	- -	- X	TDLR VERIFICATION BOUNDARY. **TBX-36**

MAIN STEAM 32-MS-2-004-1303-2

148950	TCX-2-2400-56 PIPE TO PIPE 877SB	C-F-2 C5.51	UT	1 - -	- -	- X	TDLR VERIFICATION BOUNDARY. **TBX-33**
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FEEDWATER 18-FW-2-020-1303-2

0100	TCX-2-2401-11 PIPE TO PIPE 856SB	C-F-2 C5.51	UT	1 - -	- -	X -	TDLR VERIFICATION BOUNDARY. **TBX-21**
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HIGH ENERGY LINE BREAK UNIT 2
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CLASS 2 SCHEDULED COMPONENTS

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SUMMARY EXAMINATION AREA NUMBER IDENTIFICATION	INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
	ASME SEC. XI CATGY NDE ITEM NO METH		FIRST	SECOND	THIRD	
			PERIOD	PERIOD	PERIOD	
			-----	-----	-----	
			O U T A G E			INSTRUCTIONS
			1 2	1 2	1 2	**CALIBRATION BLOCK**
			-----	-----	-----	

FEEDWATER 18-FW-2-020-1303-2

150200	TCX-2-2401-12 PIPE TO PIPE 856SB	C-F-2 CS.51	UT	1 - -	- -	X -	TDLR VERIFICATION BOUNDARY. **TBX-21**
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FEEDWATER 18-FW-2-037-2003-2

150300	TCX-2-2401-13 PIPE TO VALVE 856SB	C-F-2 CS.51	UT	1 - -	- -	X -	TDLR VERIFICATION BOUNDARY. **TBX-38**
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150400	TCX-2-2401-14 VALVE TO PIPE 856SB	C-F-2 CS.51	UT	1 - -	- -	X -	 **TBX-38**
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150500	TCX-2-2401-15 PIPE TO VALVE 856SB	C-F-2 CS.51	UT	1 - -	- -	X -	 **TBX-38**
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150600	TCX-2-2401-16 VALVE TO PIPE 856SB	C-F-2 CS.51	UT	1 - -	- -	X -	 **TBX-38**
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150700	TCX-2-2401-17 PIPE TO MOMENT RESTRAINT 856SB	C-F-2 CS.51	UT	1 - -	- -	X -	 **TBX-38**
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FEEDWATER 6-FW-2-094-2003-2

54700	TCX-2-2403-2 BRANCH CONNECTION TO PIPE 857SB	C-F-2 CS.51	UT	1 - -	- -	X -	 **TBX-34**
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HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

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SUMMARY EXAMINATION AREA NUMBER IDENTIFICATION	INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR	INSTRUCTIONS **CALIBRATION BLOCK**
	ASME SEC. XI CATGY NDE ITEM NO METH		FIRST	SECOND	THIRD		
			PERIOD	PERIOD	PERIOD		
			-----	-----	-----		
			- - - - -	O U T A G E	- - - - -		
			1 2	1 2	1 2		
			-----	-----	-----		

FEEDWATER 6-FW-2-094-2003-2

154900	TCX-2-2403-4 VALVE TO PIPE 861SB	C-F-2 C5.51	UT	1 - -	- -	X -	**TBX-34**
155000	TCX-2-2403-5 PIPE TO ELBOW 862SB	C-F-2 C5.51	UT	1 - -	- -	X -	**TBX-34**
155100	TCX-2-2403-6 ELBOW TO PIPE 863SB	C-F-2 C5.51	UT	1 - -	- -	X -	**TBX-34**
155300	TCX-2-2403-8 ELBOW TO PIPE 863SB	C-F-2 C5.51	UT	1 - -	- -	X -	**TBX-34**
155400	TCX-2-2403-9 PIPE TO VALVE 863SB	C-F-2 C5.51	UT	1 - -	- -	X -	**TBX-34**
155500	TCX-2-2403-10 VALVE TO PIPE 863SB	C-F-2 C5.51	UT	1 - -	- -	X -	TDLR VERIFICATION BOUNDARY. **TBX-34**

FEEDWATER 6-FW-2-098-1303-2

155600	TCX-2-2403-11 PIPE TO PIPE 862SB	C-F-2 C5.51	UT	1 - -	- -	X -	TDLR VERIFICATION BOUNDARY. **TBX-35**
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HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

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INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
		FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
ASME					
SEC. XI					
CATGY	NDE	- - - - - O U T A G E - - - - -			INSTRUCTIONS
ITEM NO	METH	1 2	1 2	1 2	**CALIBRATION BLOCK**
SUMMARY EXAMINATION AREA					
NUMBER	IDENTIFICATION				

FEEDWATER 6-FW-2-098-1303-2

155700	TCX-2-2403-12 PIPE TO VALVE 862SB	C-F-2 C5.51	UT	1 - -	- -	X -	TDLR VERIFICATION BOUNDARY. **TBX-35**
155800	TCX-2-2403-13 VALVE TO PIPE 862SB	C-F-2 C5.51	UT	1 - -	- -	X -	TDLR VERIFICATION BOUNDARY. **TBX-35**
155900	TCX-2-2403-14 PIPE TO TEE 862SB	C-F-2 C5.51	UT	1 - -	- -	X -	TDLR VERIFICATION BOUNDARY. **TBX-35**
156000	TCX-2-2403-15 TEE TO PIPE 862SB	C-F-2 C5.51	UT	1 - -	- -	X -	TDLR VERIFICATION BOUNDARY. **TBX-35**
156100	TCX-2-2403-16 PIPE TO ELBOW 862SB	C-F-2 C5.51	UT	1 - -	- -	X -	TDLR VERIFICATION BOUNDARY. **TBX-35**
156200	TCX-2-2403-17 ELBOW TO PIPE 863SB	C-F-2 C5.51	UT	1 - -	- -	X -	TDLR VERIFICATION BOUNDARY. **TBX-35**
156300	TCX-2-2403-18 PIPE TO ELBOW 869SB	C-F-2 C5.51	UT	1 - -	- -	X -	TDLR VERIFICATION BOUNDARY. **TBX-35**

HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

		INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR			
		ASME		FIRST	SECOND	THIRD				
		SEC. XI		PERIOD	PERIOD	PERIOD				
SUMMARY EXAMINATION AREA		CATGY	NDE	O U T A G E			INSTRUCTIONS			
NUMBER	IDENTIFICATION	ITEM NO	METH	1	2	1	2	1	2	**CALIBRATION BLOCK**

FEEDWATER 6-FW-2-000-1303-2										
156400	TCX-2-2403-19 ELBOW TO PIPE 870SB	C-F-2 CS.51	UT	1	-	-	-	X	-	TDLR VERIFICATION BOUNDARY. **TBX-35**
156500	TCX-2-2403-20 PIPE TO ELBOW 870SB	C-F-2 CS.51	UT	1	-	-	-	X	-	TDLR VERIFICATION BOUNDARY. **TBX-35**
156600	TCX-2-2403-21 ELBOW TO PIPE 869SB	C-F-2 CS.51	UT	1	-	-	-	X	-	TDLR VERIFICATION BOUNDARY. **TBX-35**
156700	TCX-2-2403-22 PIPE TO ELBOW 865SB	C-F-2 CS.51	UT	1	-	-	-	X	-	TDLR VERIFICATION BOUNDARY. **TBX-35**
156800	TCX-2-2403-23 ELBOW TO PIPE 864SB	C-F-2 CS.51	UT	1	-	-	-	X	-	TDLR VERIFICATION BOUNDARY. **TBX-35**
157000	TCX-2-2403-25 ELBOW TO PIPE 864SB	C-F-2 CS.51	UT	1	-	-	-	X	-	TDLR VERIFICATION BOUNDARY. **TBX-35**
157100	TCX-2-2403-26 PIPE TO PIPE 864SB	C-F-2 CS.51	UT	1	-	-	-	X	-	TDLR VERIFICATION BOUNDARY. **TBX-35**

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HIGH ENERGY LINE BREAK UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

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INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
		FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
ASME					
SEC. XI					
CATGY	NDE	- - - - - O U T A G E - - - - -			INSTRUCTIONS
ITEM NO	METH	1 2	1 2	1 2	**CALIBRATION BLOCK**
SUMMARY EXAMINATION AREA					
NUMBER	IDENTIFICATION				

FEEDWATER 6-FW-2-098-1303-2

157920	TCX-2-2403-35	C-F-2	UT	1 - -	- -	X -	TDLR VERIFICATION BOUNDARY.
	PIPE TO PIPE	C5.51					
	864SB						**TBX-35**
157940	TCX-2-2403-36	C-F-2	UT	1 - -	- -	X -	TDLR VERIFICATION BOUNDARY.
	PIPE TO PIPE	C5.51					
	864SB						**TBX-35**

SUPPLEMENTARY CONTAINMENT SPRAY AND RESIDUAL HEAT REMOVAL PIPING WELDS

The containment spray (CT) system piping on the discharge side of the four CT pumps contains 78 welds (15-25 each loop) that are 10-inch NPS Schedule 40 with a wall thickness of 0.365 inch. Furthermore, the residual heat removal (RHR) system piping on the discharge side of RHR pumps 1 and 2 contains a total of 166 welds on 8-inch and 10-inch NPS Schedule 40 piping with wall thicknesses of 0.322 inch and 0.365 inch, respectively.

Resulting from SSER-26, the augmented inservice inspection shall include a volumetric examination (i.e., ultrasonic examination) on 7.5 percent of the aforementioned welds. These examinations shall be distributed such that each weld or portion thereof is examined once during each 10-year interval.

Examination procedures and personnel shall be in accordance with the rules of ASME Section XI.

No special reports are required for this activity. Records of the examinations shall be maintained with the applicable work order.

Results of these examinations shall be evaluated against the acceptance criteria provided in ASME Section XI, IWC-3000.

Summary Discussion

- a. Governing Document - SSER-26.
- b. Exam Items and Boundaries - 7.5 percent of the welds discussed above.
- c. NDE Method and Schedule - Ultrasonic examination once per 10-year interval. The specific schedule by refueling outage is attached.
- d. Acceptance Criteria - ASME Section XI, IWC-3000.
- e. Special Reports - None.

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RESIDUAL HEAT REMOVAL/CONTAINMENT SPRAY UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

PAGE: 1

INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
		FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
ASME					
SEC. XI					
CATGY NOF		- - - - - O U T A G E - - - - -			INSTRUCTIONS
SUMMARY EXAMINATION AREA					
NUMBER IDENTIFICATION	ITEM NO METH	1 2	1 2	1 2	**CALIBRATION BLOCK**

RESIDUAL HEAT REMOVAL 10-RH-2-061-601R-2

170700	TCX-2-2520-35 REDUCER TO PIPE 787SB	C-F-1 CS.11	UT	1 X -	- -	- -	**TBX-10**
170750	TCX-2-2520-35L LONG. SEAM 787SB	C-F-1 CS.12	UT	1 X -	- -	- -	**TBX-10**
170800	TCX-2-2520-36 PIPE TO VALVE 787SB	C-F-1 CS.11	UT	1 X -	- -	- -	**TBX-10**
170850	TCX-2-2520-36L LONG. SEAM 787SB	C-F-1 CS.12	UT	1 X -	- -	- -	**TBX-10**
170900	TCX-2-2520-37 VALVE TO PIPE 787SB	C-F-1 CS.11	UT	1 X -	- -	- -	**TBX-10**
170950	TCX-2-2520-37L LONG. SEAM 787SB	C-F-1 CS.12	UT	1 X -	- -	- -	**TBX-10**

RESIDUAL HEAT REMOVAL 8-RH-2-064-601R-2

17B000	TCX-2-2521-48 PIPE TO FLANGE 781SB	C-F-1 CS.11	UT	1 - -	- -	- X	**TBX-7**
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RESIDUAL HEAT REMOVAL/CONTAINMENT SPRAY UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

PAGE: 2

		INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
				FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
SUMMARY EXAMINATION AREA		ASME					
		SEC. XI					
		CATGY NDE					INSTRUCTIONS
NUMBER	IDENTIFICATION	ITEM NO METH		1 2	1 2	1 2	**CALIBRATION BLOCK**

RESIDUAL HEAT REMOVAL 8-RH-2-064-601R-2

178050	TCX-2-2521-48L LONG. SEAM 781SB	C-F-1 C5.12	UT	1 - -	- -	- X	**TBX-7**
178100	TCX-2-2521-49 FLANGE TO PIPE 781SB	C-F-1 C5.11	UT	1 - -	- -	- X	**TBX-7**
178150	TCX-2-2521-49L LONG. SEAM 781SB	C-F-1 C5.12	UT	1 - -	- -	- X	**TBX-7**
178200	TCX-2-2521-50 PIPE TO ELBOW 781SB	C-F-1 C5.11	UT	1 - -	- -	- X	**TBX-7**
178250	TCX-2-2521-50L LONG. SEAM 781SB	C-F-1 C5.12	UT	1 - -	- -	- X	**TBX-7**
178300	TCX-2-2521-51 ELBOW TO PIPE 781SB	C-F-1 C5.11	UT	1 - -	- -	- X	**TBX-7**
178350	TCX-2-2521-51L LONG. SEAM 781SB	C-F-1 C5.12	UT	1 - -	- -	- X	**TBX-7**

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RESIDUAL HEAT REMOVAL/CONTAINMENT SPRAY UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

PAGE: 3

		INSPECTION INTERVAL	PLAN STATUS			PRESERVICE YEAR
			FIRST	SECOND	THIRD	
		ASME	PERIOD	PERIOD	PERIOD	
		SEC. XI	-----			
SUMMARY EXAMINATION AREA		CATGY NDE	- - - - - O U T A G E - - - - -			INSTRUCTIONS
NUMBER IDENTIFICATION		ITEM NO METH	1 2	1 2	1 2	**CALIBRATION BLOCK**

RESIDUAL HEAT REMOVAL 10-RH-2-026-601R-2

185100	TCX-2-2531-4 PIPE TO ELBOW 789SB	C-F-1 C5.11	UT	1 X -	- -	- -	**TBX-10**
185150	TCX-2-2531-4L LONG. SEAM 789SB	C-F-1 C5.12	UT	1 X -	- -	- -	**TBX-10**
185200	TCX-2-2531-5 ELBOW TO PIPE 789SB	C-F-1 C5.11	UT	1 X -	- -	- -	**TBX-10**
185300	TCX-2-2531-6 PIPE TO FLANGE 800SB	C-F-1 C5.11	UT	1 X -	- -	- -	**TBX-10**

RESIDUAL HEAT REMOVAL 8-RH-2-027-601R-2

190100	TCX-2-2532-36 PIPE TO ELBOW 797SB	C-F-1 C5.11	UT	1 - -	- -	- X	**TBX-7**
190150	TCX-2-2532-36L LONG. SEAM 797SB	C-F-1 C5.12	UT	1 - -	- -	- X	**TBX-7**
190200	TCX-2-2532-37 ELBOW TO PIPE 797SB	C-F-1 C5.11	UT	1 - -	- -	- X	**TBX-7**

DATE: 02/16/94

RESIDUAL HEAT REMOVAL/CONTAINMENT SPRAY UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

PAGE: 4

SUMMARY	EXAMINATION AREA	INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR	INSTRUCTIONS
		ASME	SEC. XI	FIRST PERIOD	SECOND PERIOD	THIRD PERIOD		
NUMBER	IDENTIFICATION	CATGY	NDE	O U T A G E				
		ITEM NO	METH	1 2	1 2	1 2		**CALIBRATION BLOCK**

RESIDUAL HEAT REMOVAL 8-RH-2-027-601R-2

190250	TCX-2-2532-37L LONG. SEAM 797SB	C-F-1	UT	1 - -	- -	- X		**TBX-7**
		C5.12						
190300	TCX-2-2532-38 PIPE TO ELBOW 797SB	C-F-1	UT	1 - -	- -	- X		**TBX-7**
		C5.11						
190350	TCX-2-2532-38L LONG. SEAM 797SB	C-F-1	UT	1 - -	- -	- X		**TBX-7**
		C5.12						
190400	TCX-2-2532-39 ELBOW TO PIPE 798SB	C-F-1	UT	1 - -	- -	- X		**TBX-7**
		C5.11						
190450	TCX-2-2532-39L LONG. SEAM 798SB	C-F-1	UT	1 - -	- -	- X		**TBX-7**
		C5.12						

CONTAINMENT SPRAY 10-CT-2-011-301R-2

203800	TCX-2-2539-2 ELBOW TO PIPE 776SB	C-F-1	UT	1 - -	- X	- -		**TBX-10**
		C5.11						
203850	TCX-2-2539-2L LONG. SEAM 776SB	C-F-1	UT	1 - -	- X	- -		**TBX-10**
		C5.12						

DATE: 02/16/94

RESIDUAL HEAT REMOVAL/CONTAINMENT SPRAY UNIT 2
AUGMENTED INSERVICE INSPECTION PLAN
CLASS 2 SCHEDULED COMPONENTS

PAGE: 5

		INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
				FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
SUMMARY EXAMINATION AREA		ASME					INSTRUCTIONS
		SEC. XI					
NUMBER IDENTIFICATION		CATGY NDE					
		ITEM NO METH		1 2	1 2	1 2	**CALIBRATION BLOCK**

CONTAINMENT SPRAY 10-CT-2-011-301R-2

203900	TCX-2-2539-3 PIPE TO ELBOW 776SB	C-F-1 C5.11	UT	1 - -	- X -	- -	**TBX-10**
203950	TCX-2-2539-3L LONG. SEAM 776SB	C-F-1 C5.12	UT	1 - -	- X -	- -	**TBX-10**
204000	TCX-2-2539-4 ELBOW TO PIPE 776SB	C-F-1 C5.11	UT	1 - -	- X -	- -	**TBX-10**
204050	TCX-2-2539-4L LONG. SEAM 776SB	C-F-1 C5.12	UT	1 - -	- X -	- -	**TBX-10**
204900	TCX-2-2539-13 VALVE TO PIPE 787SB	C-F-1 C5.11	UT	1 - -	- X -	- -	**TBX-10**
204950	TCX-2-2539-13L LONG. SEAM 787SB	C-F-1 C5.12	UT	1 - -	- X -	- -	**TBX-10**
205000	TCX-2-2539-14 PIPE TO ELBOW 787SB	C-F-1 C5.11	UT	1 - -	- X -	- -	**TBX-10**

DATE: 02/16/94

RESIDUAL HEAT REMOVAL/CONTAINMENT SPRAY UNIT 2
 AUGMENTED INSERVICE INSPECTION PLAN
 CLASS 2 SCHEDULED COMPONENTS

PAGE: 6

INSPECTION INTERVAL		PLAN STATUS			PRESERVICE YEAR
		FIRST PERIOD	SECOND PERIOD	THIRD PERIOD	
ASME					
SEC. XI					
CATGY NDE		- - - - -	O U T A G E	- - - - -	INSTRUCTIONS
ITEM NO METH		1 2	1 2	1 2	**CALIBRATION BLOCK**

CONTAINMENT SPRAY 10-CT-2-011-301R-2

205050	TCX-2-2539-14L LONG. SEAM 787S8	C-F-1 C5.12	UT	1 - -	X	- -	**TBX-10**
205100	TCX-2-2539-15 ELBOW TO PIPE 787S8	C-F-1 C5.11	UT	1 - -	- X	- -	**TBX-10**
205150	TCX-2-2539-15L LONG. SEAM 787S8	C-F-1 C5.12	UT	1 - -	- X	- -	**TBX-10**

REACTOR VESSEL HEAD AND INTERNALS LIFTING DEVICES

ANSI N14.6-1978 provides detailed requirements for the design, fabrication, testing, maintenance, and quality assurance of special lifting devices at nuclear power stations. To address the control of heavy loads and to ensure against and mitigate the consequences of postulated accidental load drops, the Nuclear Regulatory Commission (NRC) issued NUREG 0612.

Westinghouse Electric Corporation conducted an evaluation and documented the results under WCAP-10156, Rev. 1 to determine the acceptability of the reactor vessel head and internals lifting devices to meet the requirements of NUREG 0612. As a result of this effort, recommendations were made to perform periodic non-destructive surface examinations on prescribed critical welds and/or parts once every ten years as part of an inservice inspection outage. The above inspection methodology is endorsed via TXX-4226.

ANSI N14.6 defines the acceptance criteria as the requirements of ASME Section III, Division 1, paragraphs NF-5350 and NF-5340. Furthermore, inspections utilizing liquid penetrant or magnetic particle examination shall be performed by written procedures and by personnel, both qualified in accordance with the rules in ASME Section V, Articles 1, 6, 7, 24, and 25.

No special reports are required for this activity. Records of the examinations shall be maintained with the applicable work order.

Summary Discussion

- a. Governing Document - ANSI N14.6-1978, NUREG 0612 and TXX-4226.
- b. Exam Items and Boundaries - Reactor vessel head and internal lifting rigs' critical welds and/or parts as described in the attachments (Ref. WCAP-10156, Rev. 1: Tables A-1 through A-4).
- c. NDE Method and Schedule - Liquid penetrant and/or magnetic particle examination shall be performed once every ten years. The exam should be conducted during the end of interval, 10 year ISI outage.
- d. Acceptance Criteria - Liquid penetrant and magnetic particle acceptance standards shall be as indicated in paragraphs NF-5350 and NF-5340 of the ASME Boiler and Pressure Vessel Code, Section III, Division 1.
- e. Special Reports - None.

ICR-01

REACTOR VESSEL HEAD LIFT RIG, CRITICAL ITEMS LIST
PER ANSI N14.6-1978

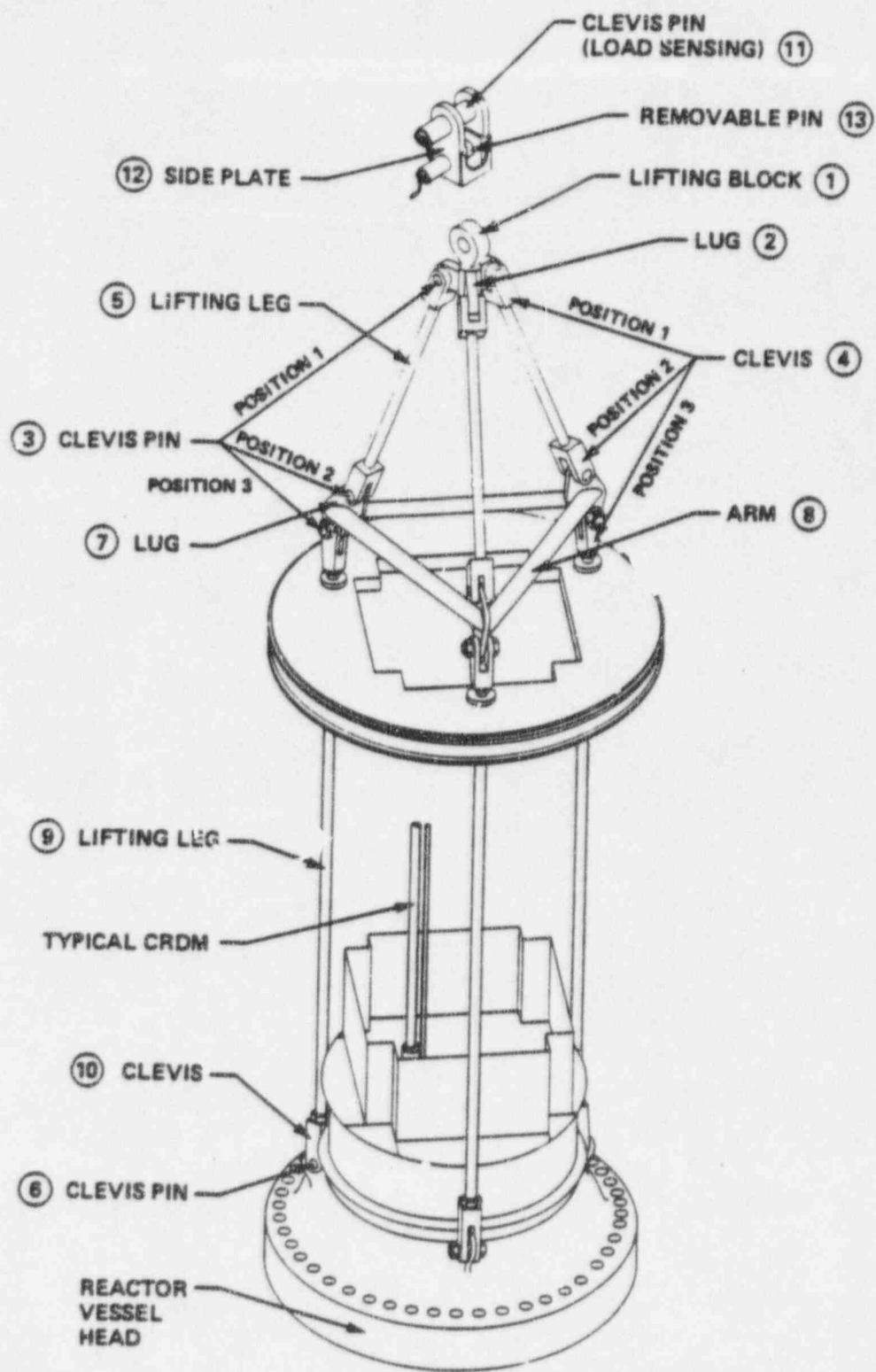
Item (a)	Description	Material	Non-destructive Examination Method
1	Lifting Block	ASTM A350 GR. LF	Magnetic Particle
2	Lug	ASTM A516 Grade 70	Magnetic Particle
3,6	Clevis Pin	ASTM A434 AISI 4340 Steel Class BD	Magnetic Particle
4,10	Clevis	ASTM A668 Forging and Class L AISI 4340	Magnetic Particle
5,9	Lifting Leg	ASTM A434 Class BC AISI 4340	Magnetic Particle
11	Clevis Pin (load sensing)	ASTM A564 Type XM12	Magnetic Particle
12	Side Plates	ASTM 533 Type B Class 1	None
13	Removable Pin	ASTM A564 Type 630	Liquid Penetrant

(a) See Page 4

**REACTOR VESSEL HEAD LIFT RIG, CRITICAL ITEMS LIST OF WELDS
PER ANSI N14.6-1978**

Item (a)	Description	Non-destructive Examination Method
1,2	Lugs to Lifting Block (Full Penetration)	Magnetic Particle
7,8	Spreader Arm Lug to Spreader Arm (fillet)	Magnetic Particle

(a) See Page 4



Reactor Vessel Head Lift Rig

**REACTOR VESSEL INTERNALS LIFT RIG
CRITICAL ITEMS LIST
PER ANSI N14.6-1978**

Item (a)	Description	Material	Non-destructive Examination Method
1	Lifting Block	ASTM A350 GR. LF 2	Magnetic Particle
2	Lifting Block Lug	ASTM A516 Grade 70	Magnetic Particle
3,7	Clevis Pin	ASTM A564 Grade 70 Precipitation Hardening SST Age treated @ 1150° F/4HRS. Air cooled RC 28-31	Liquid Penetrant
4,6	Clevis	ASTM A471 Class 3 Steel Forging	Magnetic Particle
5	Sling Rod	ASTM A434 Class BC AISI 4340 or (ASTM A588)	Magnetic Particle
8,11	Spread Lug Leg Lug	ASTM A516 GR 70 STL Plate Normalized	None
13	Mounting Block	ASTM 350 LFI Forging Steel	None
12	Leg Channels	ASTM A36 CS, HR	None

(a) See Page 8

**REACTOR VESSEL INTERNALS LIFT RIG
CRITICAL ITEMS LIST
PER ANSI N14.6-1978**

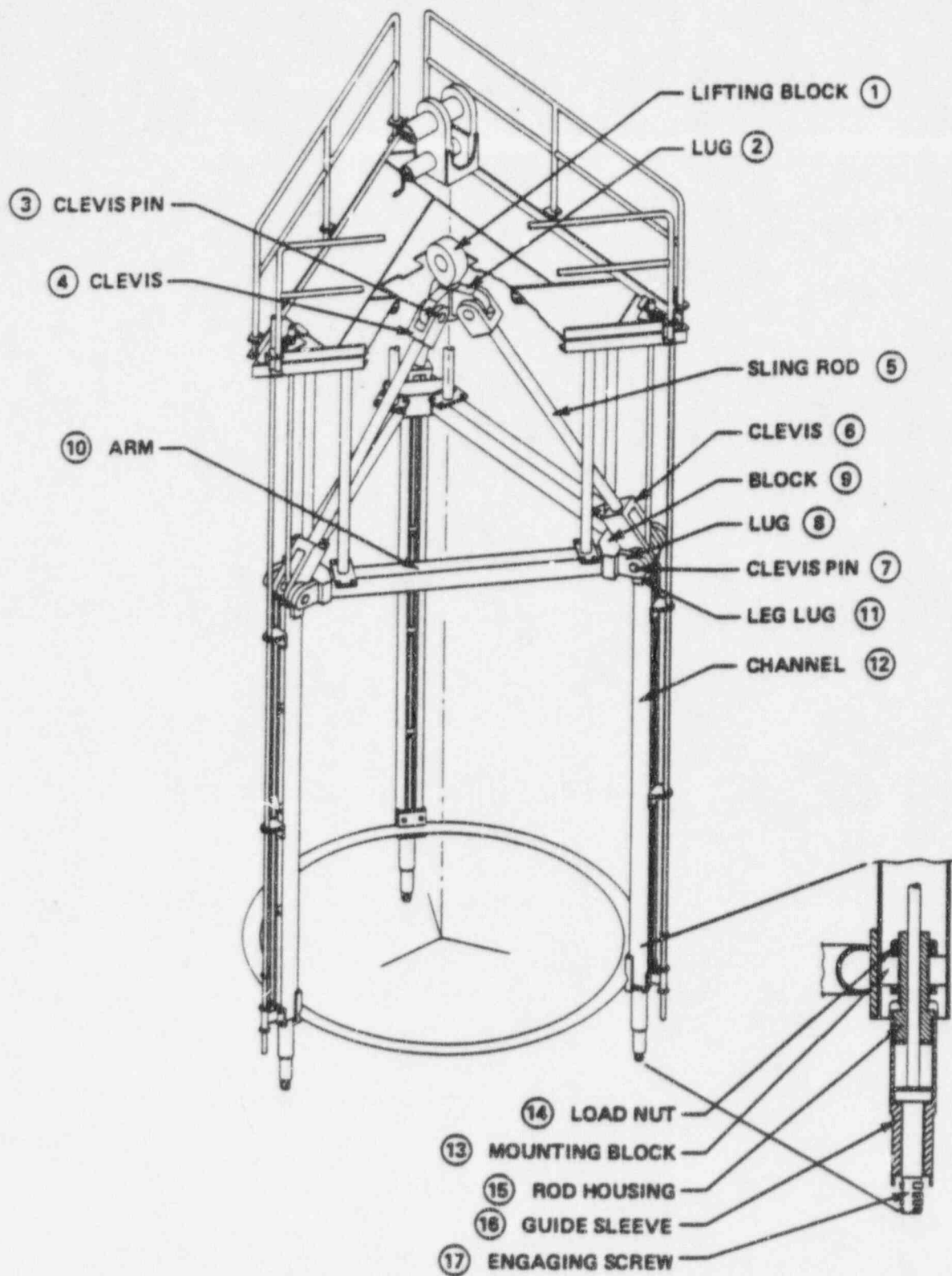
Item (a)	Description	Material	Non-destructive Examination Method
14,15	Load Nuts Rod Housing	ASTM A276 Type 304 SST, Hot Rolled, Condition A	None
16	Guide Sleeve	ASTM A276 Type 304 SST, Hot Rolled, Annealed & Pickled, Condition A	Liquid Penetrant
17	Engaging Screw	ASTM A564 Type 630, 17-4 pH Steel @ 1100°F for 4 hours	Liquid Penetrant

(a) See Page 8

**REACTOR VESSEL INTERNALS LIFT RIG
CRITICAL ITEMS LIST OF WELDS
PER ANSI N14.6-1978**

Item (a)	Description	Non-destructive Examination Method
1,2	Lugs to Lifting Block (Full Penetration)	Magnetic Particle
8,9	Lug to Spreader Block (Full Penetration)	Magnetic Particle
11,12	Leg Lug to Channel Leg (fillet)	Magnetic Particle
12,13	Mounting Block to Channel Leg (fillet)	Magnetic Particle

(a) See Page 8



Reactor Vessel Internals Lift Rig

SUMMARY OF REVISIONS

Rev. No.

Rev. Summary

0

- Original issue

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AISI PLAN INTERIM CHANGE REQUEST (ICRs)

<u>ICR No.</u>	<u>AFFECTED PAGES</u>	<u>CHANGE</u>
AISI-2R0-01	Section 6 Page 1	Schedule lifting rig exams at the 10 year ISI outage.
AISI-2R0-02	Section 3 Page 1 and 2	Adopted wear method and acceptance criteria from WCAP 12866. Documented wear found during 2RF01.
AISI-2R0-03	Section 4 pages 2, 4 and 7	Removed inaccessible exam items from table.

ENCLOSURE 2 TO TXX-95002

[FSAR Pages 1A(N)-76 and 1A(N)-78]

- 46 | Regulatory Guide 1.150
- 46 | Ultrasonic Testing of Reactor Vessel Welds During Preservice and
Inservice Examinations
- 46 | Discussion
- 46 | The CPSES position on Revision 1 (2/83) of this guide is as follows:
- 46 | Preservice Inspection
- 46 | A partial R.G. 1.150 inspection was performed on Units 1 and 2 reactor
vessels in accordance with Reference [21].
- 46 | Inservice Inspection
- 46 | CPSES complies with revision 1 of this regulatory guide.

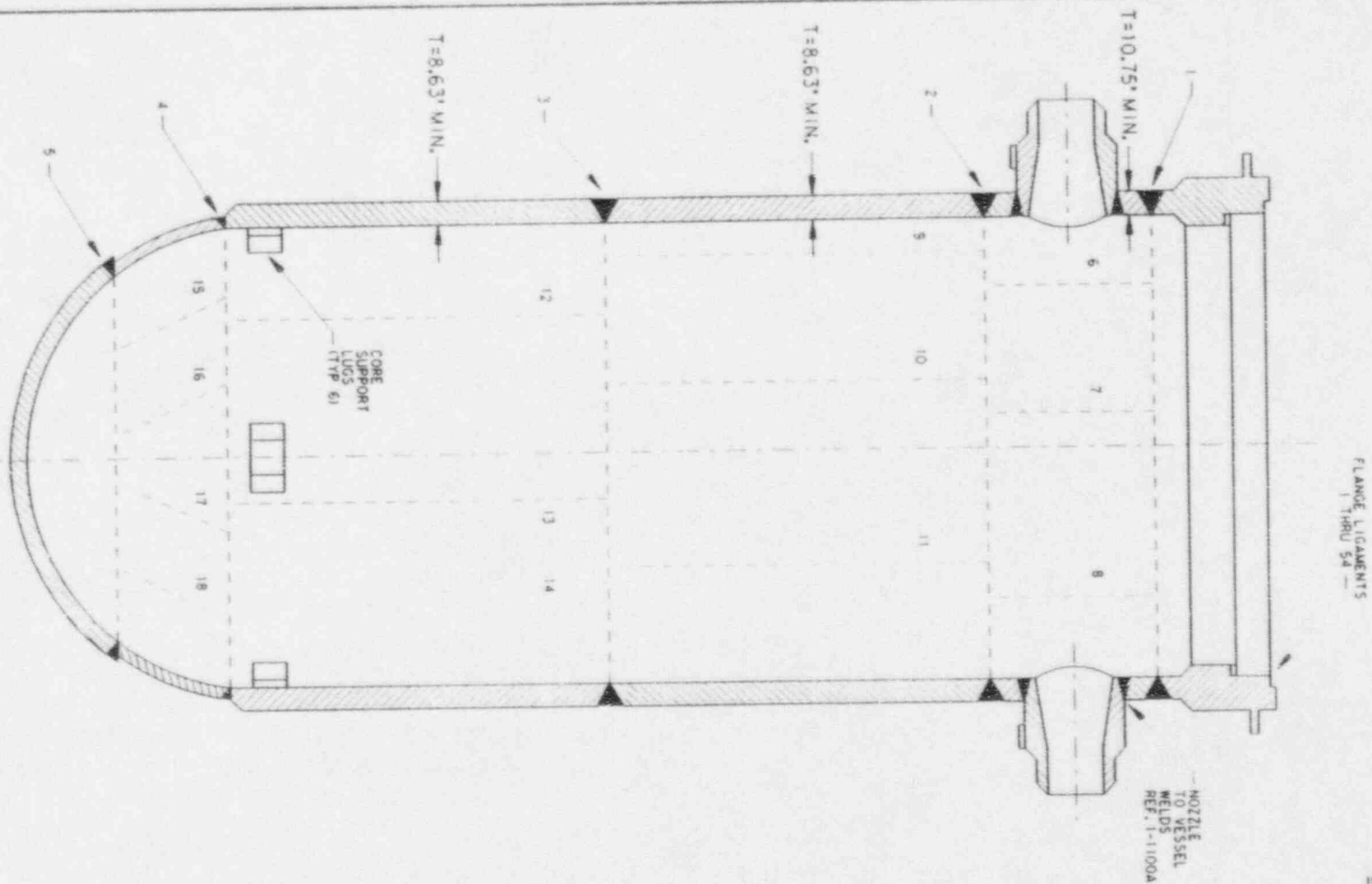
- 91 | Regulatory Guide 1.155
Station Blackout
- | Discussion
Refer to Appendix 1A(B)

CPSES/FSAR

11. "Environmental Qualification of Westinghouse Class 1E Equipment," WCAP-8587, October 1975.
12. DELETED
13. DELETED
14. Letter NS-CE-784, dated September 22, 1975, C. Eicheldinger (Westinghouse) to the Secretary of the Nuclear Regulatory Commission.
- 8 | 15. Letter NS-CE-1157 dated August 13, 1976, C. Eicheldinger (Westinghouse) to the Secretary of the Nuclear Regulatory Commission.
- 8 | 16. Butterworth, G. and Miller, R. B., "Methodology for Qualifying Westinghouse WRD Supplied NSSS Safety-Related Electrical Equipment," WCAP-8587, Revision 2, February 1979.
- 8 | 17. "Equipment Qualification Data Packages," WCAP-8587, Supplement 1, November, 1978.
- 8 | 18. Jarecki, S. J., "General Method of Developing Multifrequency Biaxial Test Inputs for Bistables," WCAP-8624 (Proprietary), September 1975 and WCAP-8695 (Non-Proprietary), August 1975.
- 8 | 19. Fisher and Struik, Guide to the Design Criteria of Bolted & Riveted Joints, John Wiley & Sons, 1974, p. 54.
- 8 | 20. Chesson, E. Jr. Faustino, N. L., Munse, W. H., High Strength Bolts Subjected to Tension and Shear, Journal of the Structural Division, Proceedings of the American Society of Civil Engineer, October 1965, pp. 155-180.
- 46 | 21. Letter TXX-3632, dated March 1, 1983, H. C. Schmidt to B. J. Youngblood, NRC Licensing Branch No. 1.

ENCLOSURE 3 TO TXX-95002

1/134



ILLUSTRATIVE USE ONLY

NOTES: WELDS 4, 5, 15, 16, 17 & 18 - T=5.38\"

DESCRIPTION: REACTOR VESSEL
VESSEL MATERIAL SA-533
NOZZLE MATERIAL SA-508

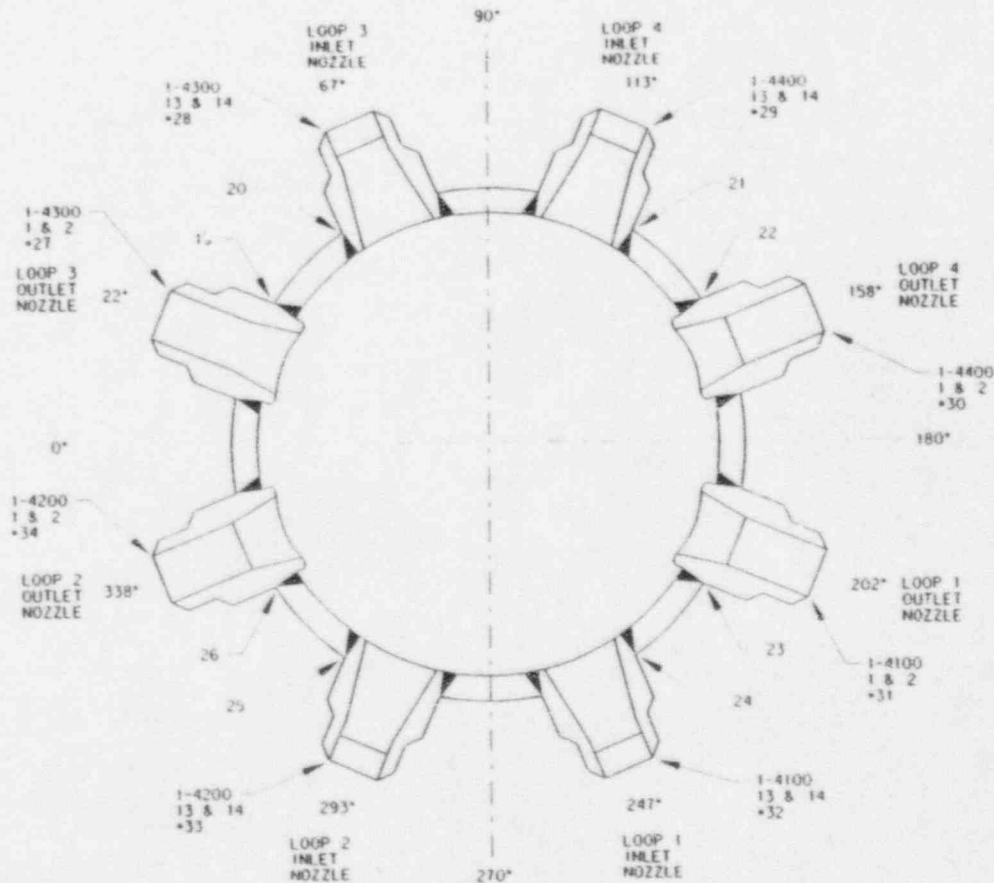
TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB May, RB May 2-1-94*

TCX-1-1100 REV. 2 09-01-94

2/134



ILLUSTRATIVE USE ONLY

NOTES: • REFERENCE FOR REMOTE TOOL EXAMINATIONS
INNER RADIUS EXAMINATION ITEMS ARE IDENTIFIED
BY THE CORRESPONDING NOZZLE TO SHELL WELD
NUMBER WITH AN "IR" SUFFIX.

DESCRIPTION: REACTOR VESSEL NOZZLES

TU ELECTRIC
CPSES UNIT 2

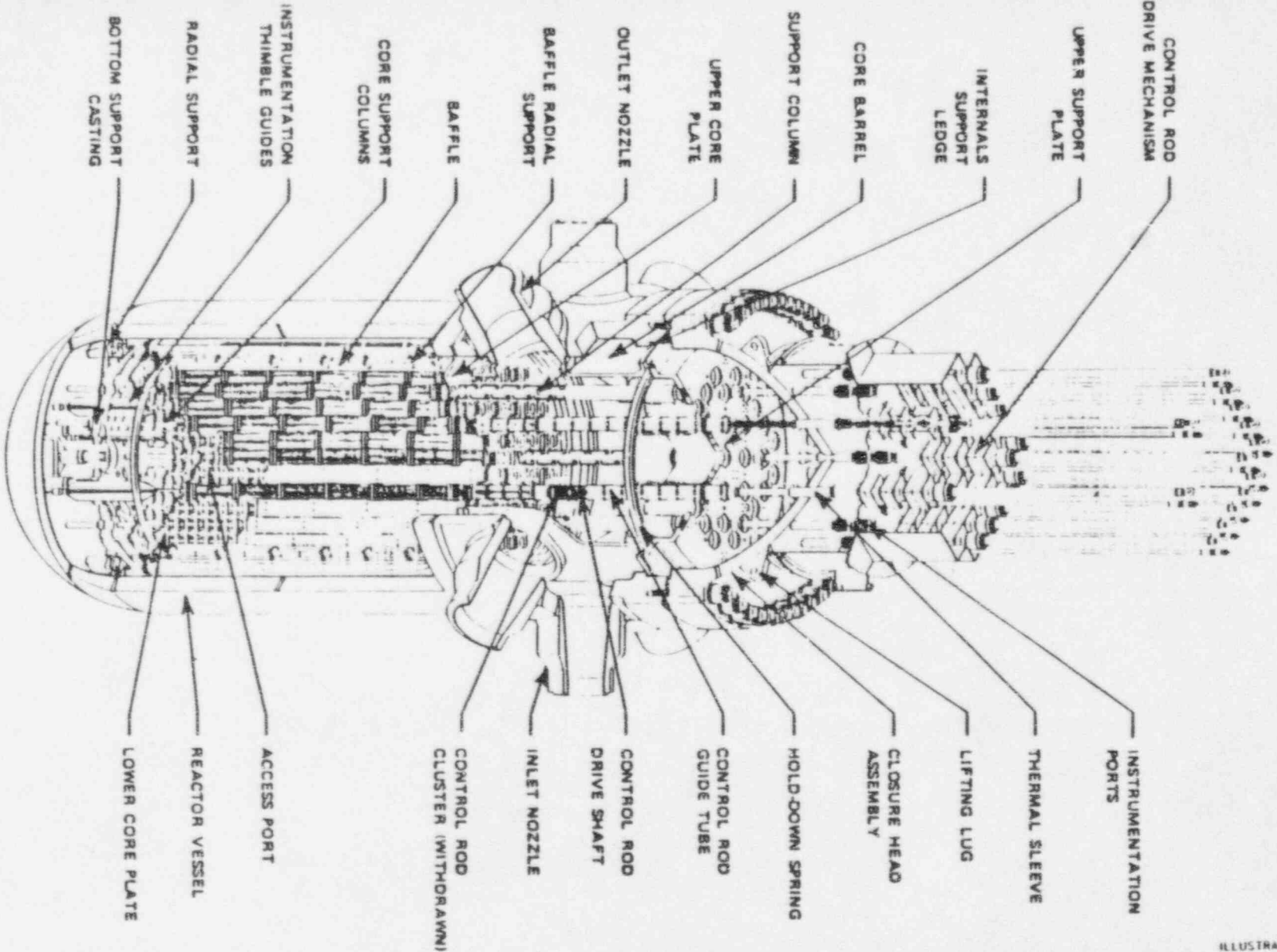
INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB May BB May 9-1-94*

TCX-1-1100A REV. 2 09-01-94

3/134

R.V. INTERNALS

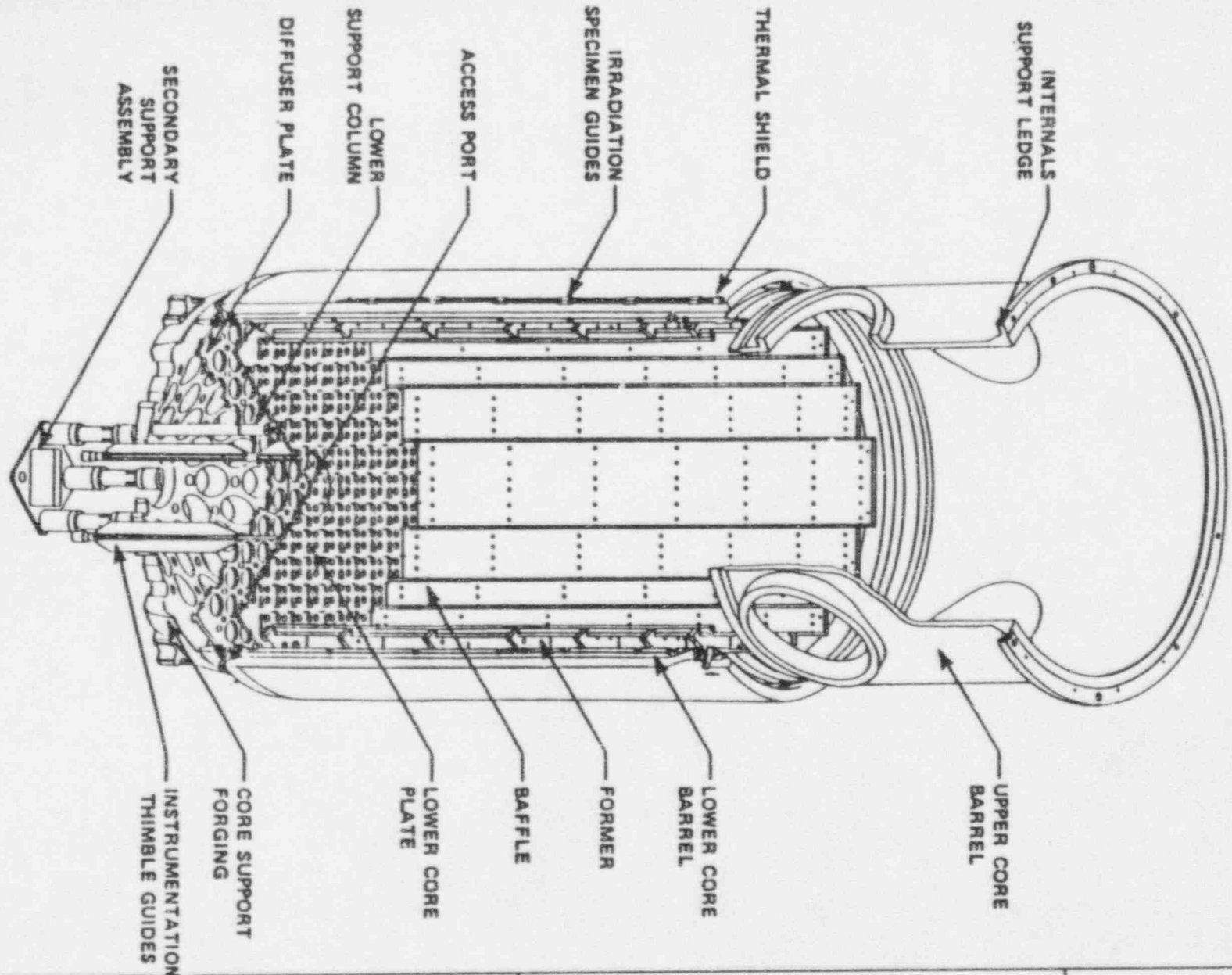


ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: REACTOR VESSEL INTERNALS	TU ELECTRIC		
		CPSES UNIT 2		
APPROVAL: <i>RB May</i> 11-3-94		INSERVICE INSPECTION		
		LOCATION ISOMETRIC		
		TCX-1-1200	SHEET 1 OF 2	REV. 1 11-03-94

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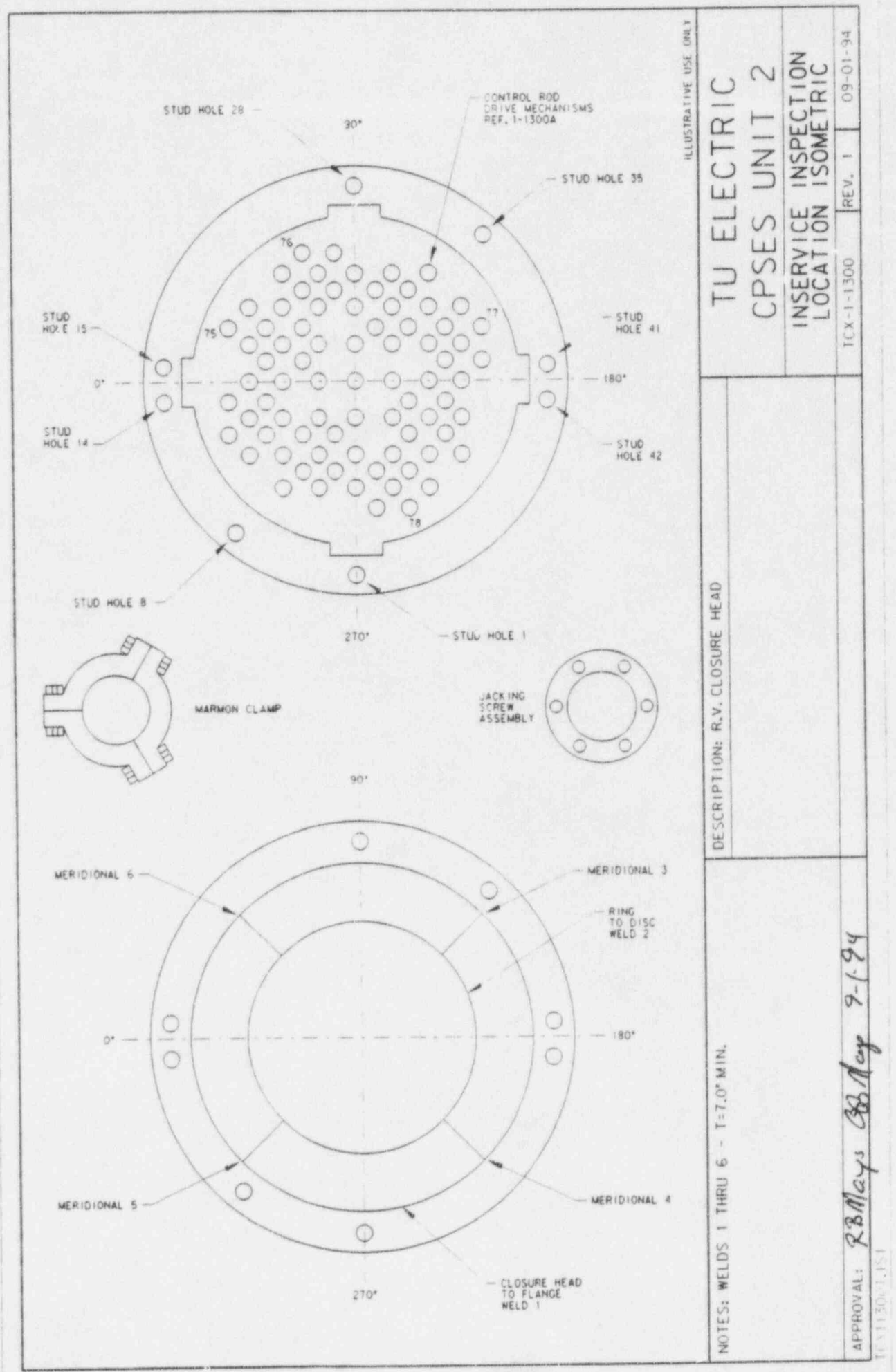
R.V. INTERNALS



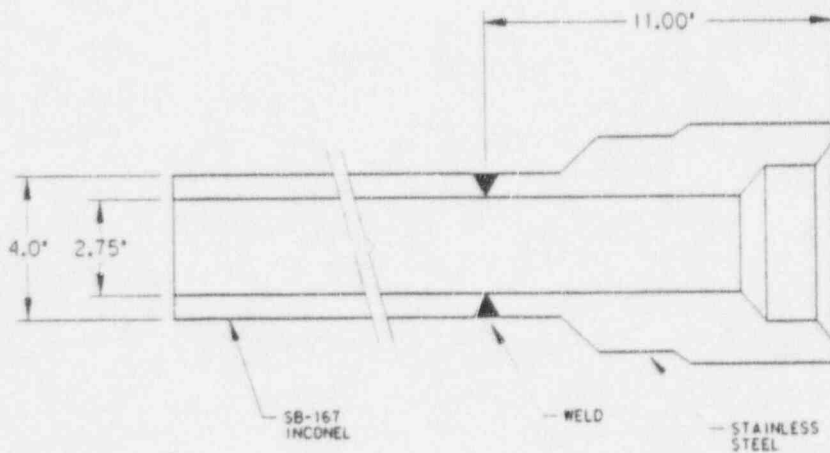
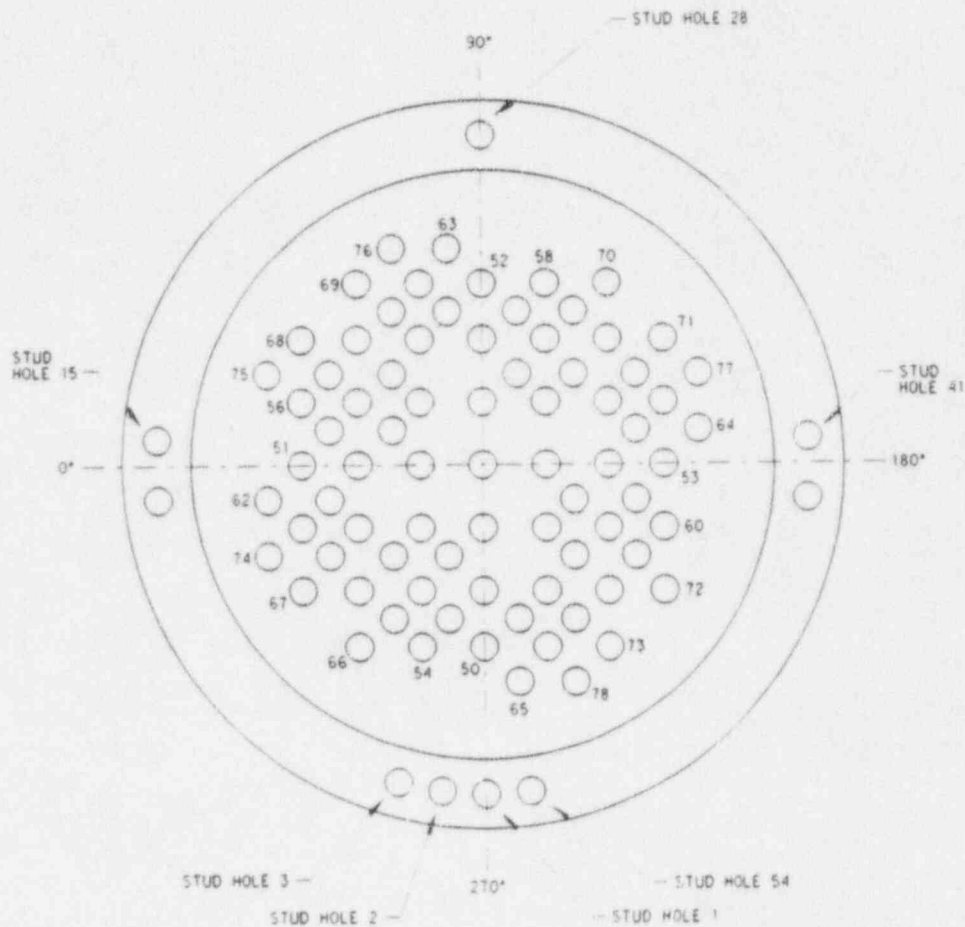
ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: REACTOR VESSEL INTERNALS	TU ELECTRIC CPSES UNIT 2	
		INSERVICE INSPECTION LOCATION ISOMETRIC	
APPROVAL: <i>RB May</i> 11-3-94		TCX-1-1200 SHEET 2 OF 2	REV. 1 11-03-94

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ILLUSTRATIVE USE ONLY

DESCRIPTION: CRD MECHANISMS

NOTES: PERIPHERAL - 50 THRU 54, 56, 58, 60, 62 THRU 78

TU ELECTRIC
CPSES UNIT 2

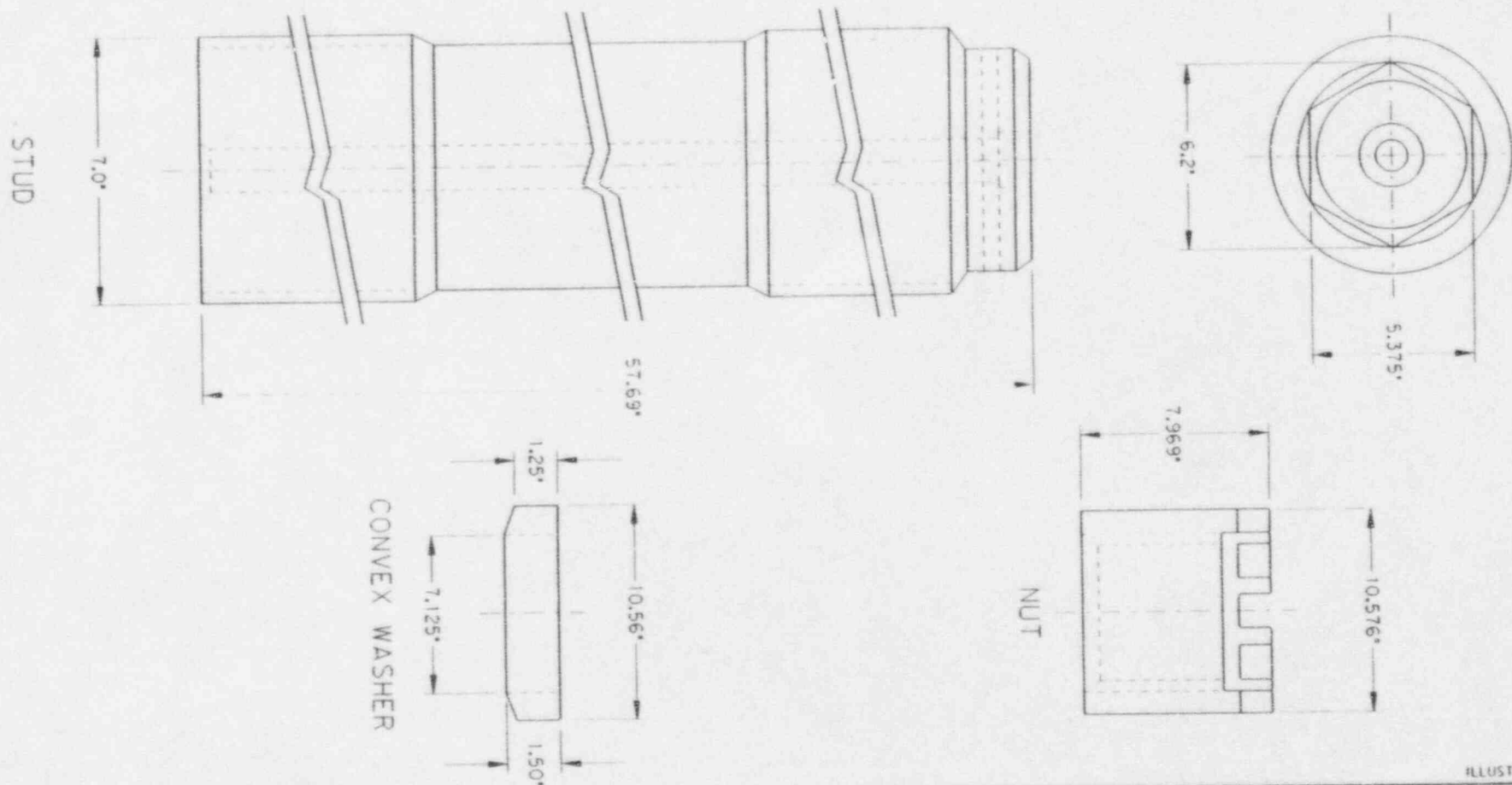
INSERVICE INSPECTION
LOCATION ISOMETRIC

TCX-1-1300A REV. 1 09-01-94

APPROVAL: RB May 2-1-94

TCX 1300A1, 151

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ILLUSTRATIVE USE ONLY

NOTES: SEE MANUFACTURERS DRAWINGS FOR STUD END AND CONICAL BORE DETAILS NOT SHOWN HERE.

DESCRIPTION: R.V. STUDS, NUTS & WASHERS
STUD, NUT & WASHER MATERIAL - SA-540

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

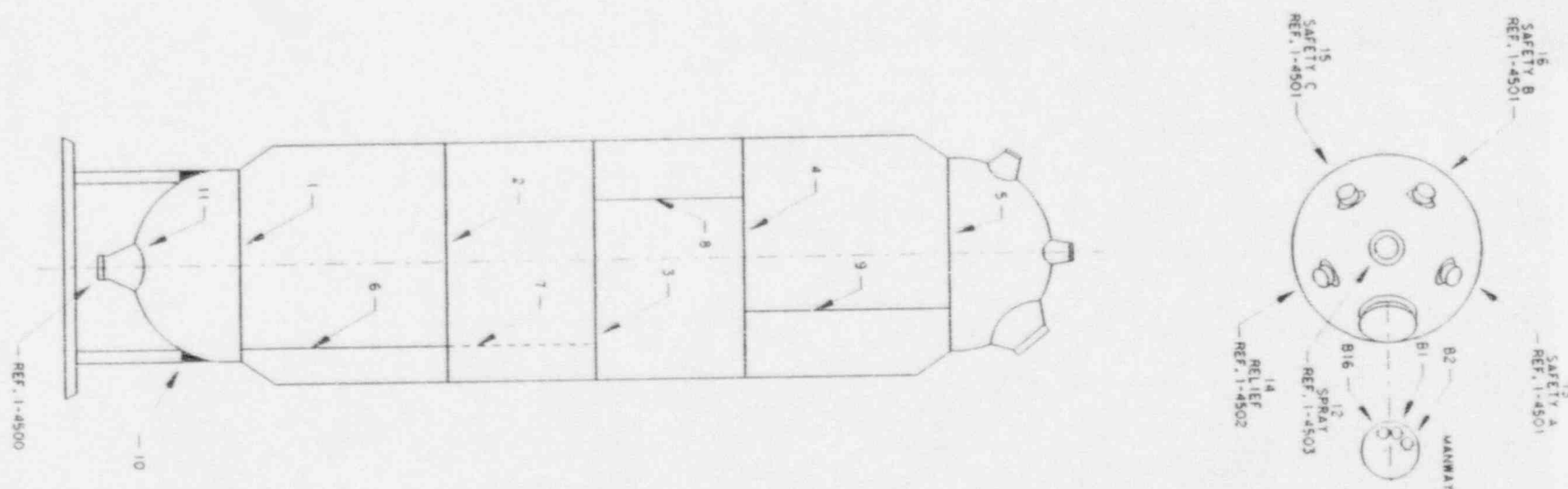
APPROVAL: *RB Mays* 08 May 9-1-94

TCX-1-1400

REV. 2

09-01-94

8/134



ILLUSTRATIVE USE ONLY

NOTES: INNER RADIUS EXAMINATION ITEMS ARE IDENTIFIED BY THE CORRESPONDING NOZZLE TO SHELL WELD NUMBER WITH AN 'IR' SUFFIX.

DESCRIPTION: PRESSURIZER

(TOP HEAD) 2.0"/SA-533
 (BOTTOM HEAD) 2.55"/SA-533
 (SHELL) 4.0"/SA-533
 (SUPPORT SKIRT) 1.5"/SA-516
 (BOLTING) 1.875" DIA./16.11" LENGTH

TU ELECTRIC
 CPSES UNIT 2

INSERVICE INSPECTION
 LOCATION ISOMETRIC

APPROVAL:

RB May OB May 8-1-94

TCX-1-2100

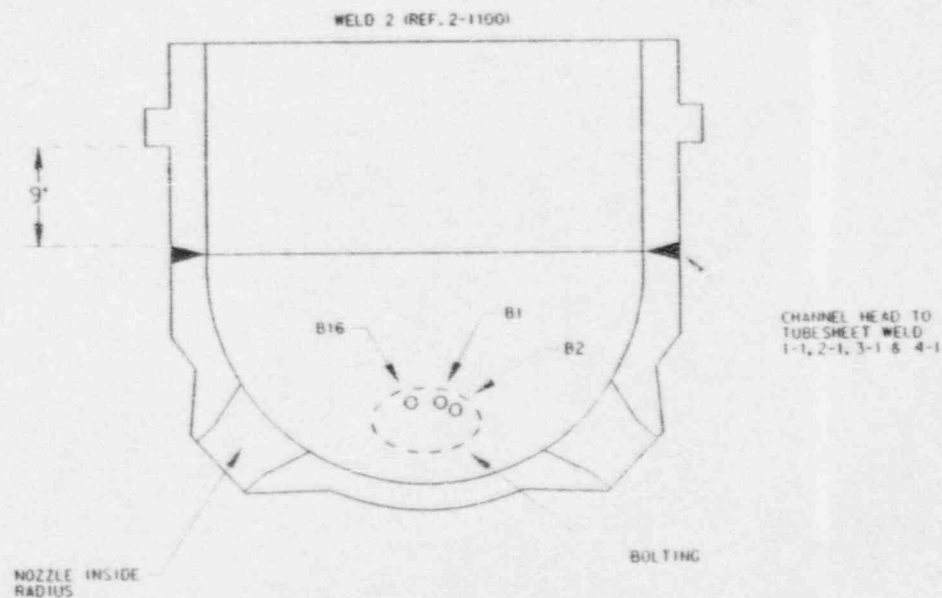
REV. 1

09-01-94

TCX121001,151

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STEAM GENERATOR	WELD	HANWAY	BOLTING	INSIDE RADIUS
1	1-1	HOT SIDE	1-B1 TO 1-B16	1A
		COLD SIDE	1-B17 TO 1-B32	1B
2	2-1	HOT SIDE	2-B1 TO 2-B16	2A
		COLD SIDE	2-B17 TO 2-B32	2B
3	3-1	HOT SIDE	3-B1 TO 3-B16	3A
		COLD SIDE	3-B17 TO 3-B32	3B
4	4-1	HOT SIDE	4-B1 TO 4-B16	4A
		COLD SIDE	4-B17 TO 4-B32	4B



ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: STEAM GENERATORS 1, 2, 3 & 4
(TUBESIDE) 5.3"/SA-508
(HEADSIDE) 5.3"/SA-216
(BOLTING) 1.875" DIA./16.11" LENGTH

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB May, AS May 9-84*

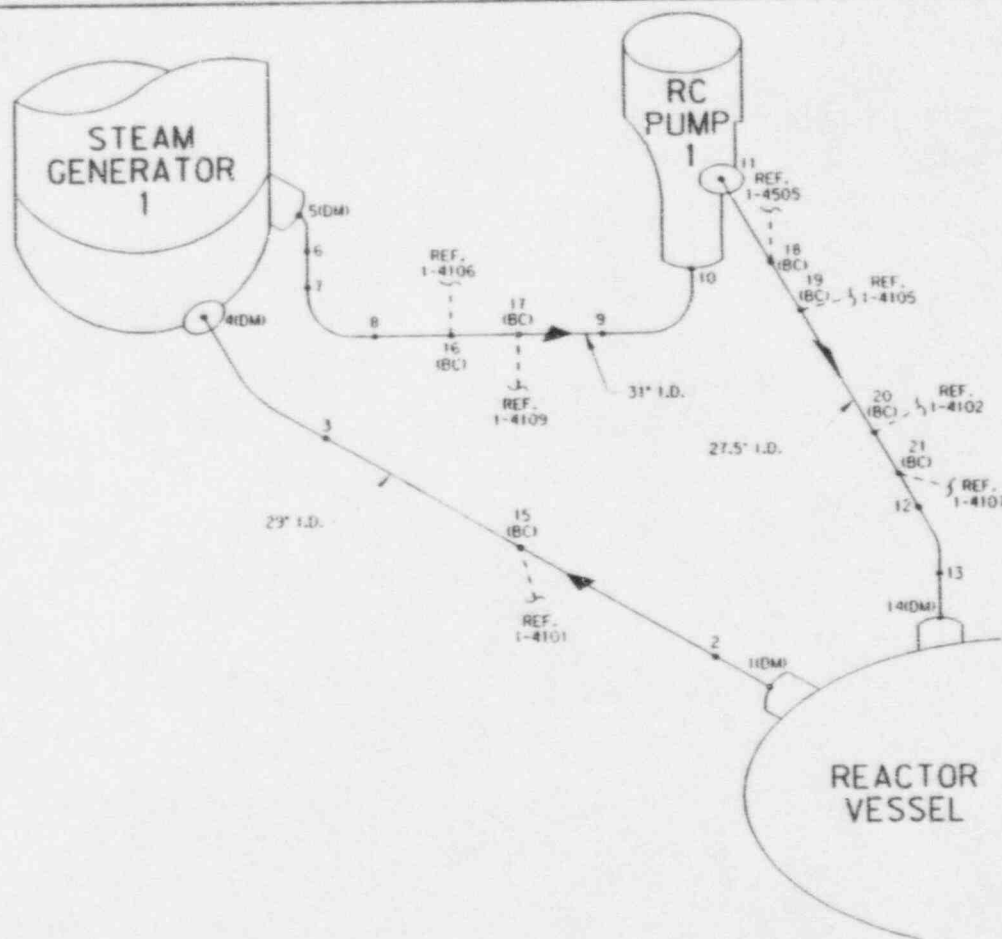
TCX-1-3100

REV. 1

09-01-94

TCX-131001.151

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ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: REACTOR COOLANT LOOP 1

T/SCH: (31\"/>

SA-351-CF8A

BRP: RC-2-520-001

FLOW: M2-0250

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

TCX-1-4100

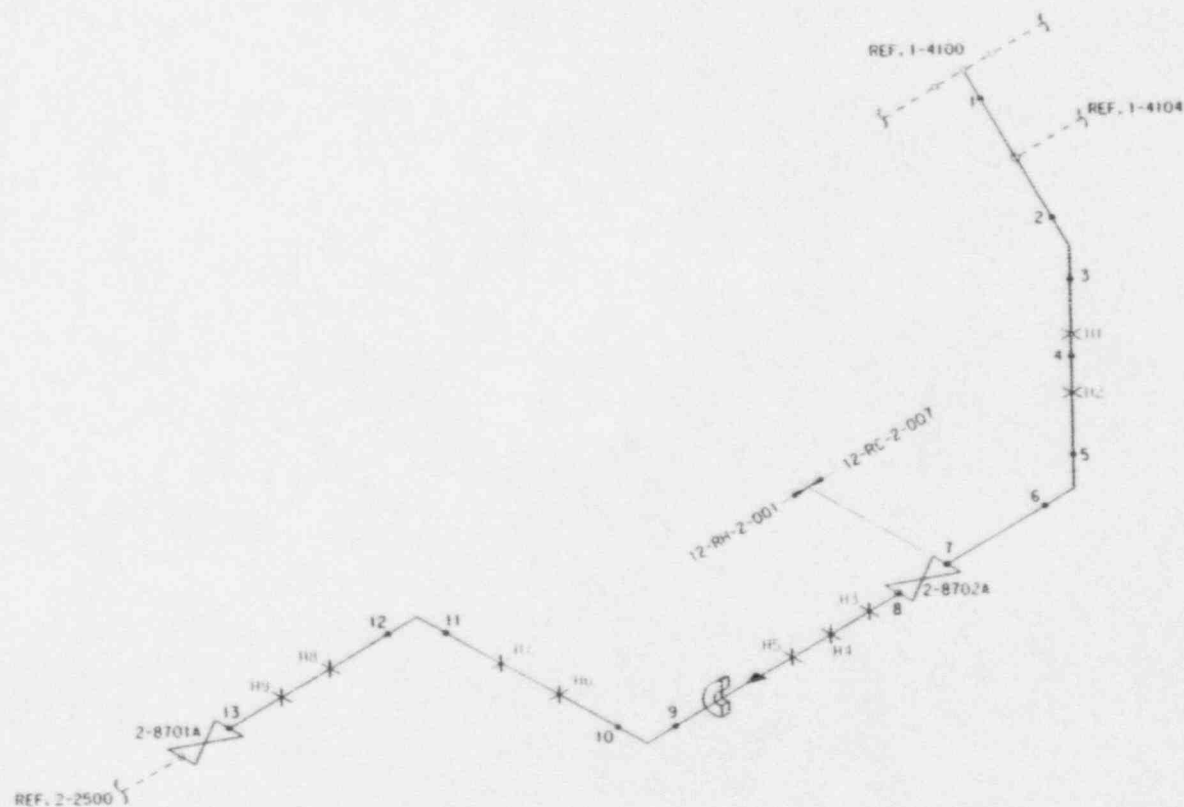
REV. 1

09-01-94

APPROVAL: *RBN/ays FBN/ays 9.1.94*

TCX-1-4100-151

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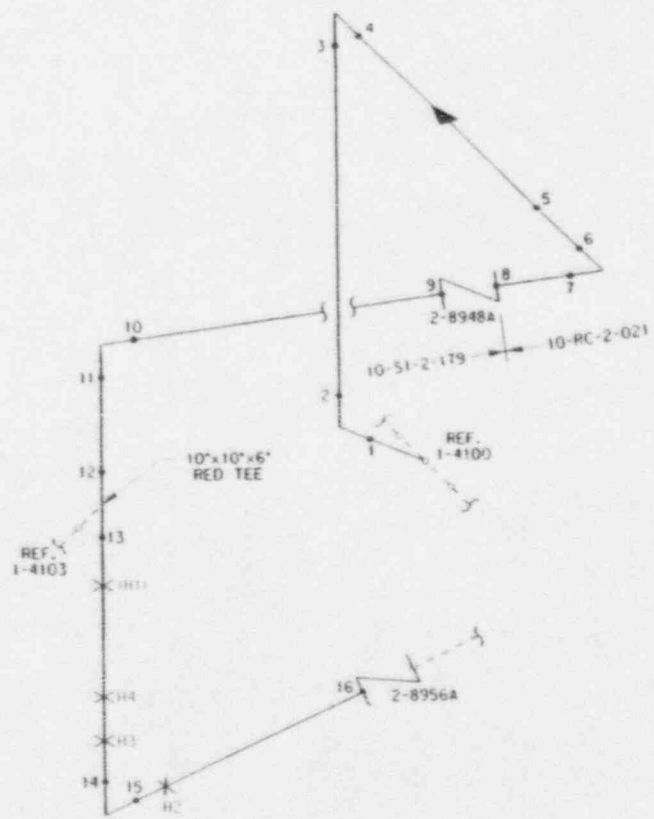


- H1 : RH-2-001-402-C41R
- H2 : RC-2-007-401-C41R
- H3 : RH-2-001-404-C41R
- H4 : RH-2-001-406-C41R
- H5 : RH-2-001-407-C41R
- H6 : RH-2-001-402-C41R
- H7 : RH-2-001-409-C41R
- H8 : RH-2-001-408-C41R
- H9 : RH-2-001-405-C41R

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: REACTOR COOLANT/RHR	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (12")1,125"/140			
	BRP: RC-2-RB-021, RH-2-RB-001, RH-2-RB-003	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FLOW: M2-0250, M2-0260			
APPROVAL: <i>RB May 7.1.94</i>		TCX-1-4101	REV. 1	09-01-94

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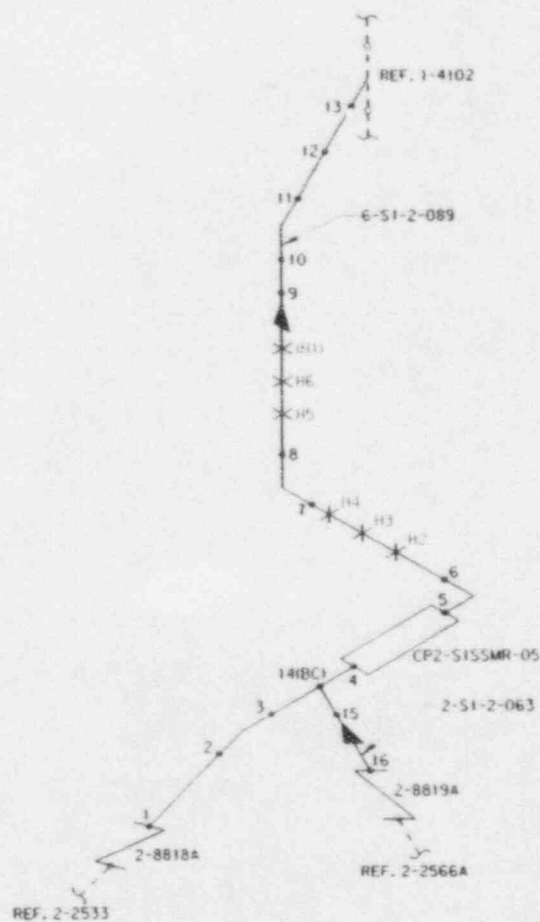


H01 : S1-2-179-401-C41R
H2 : S1-2-179-402-C41R
H3 : S1-2-179-403-C41R
H4 : S1-2-179-404-C41R

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: SAFETY INJECTION/REACTOR COOLANT	TU ELECTRIC CPSES UNIT 2		
	T/SCH: 110"1.00"/140			
	BRP: RC-2-RB-032, S1-2-RB-068	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FLOW: M2-0250, M2-0262			
APPROVAL: <i>RRM/ops 06-May 9-1-94</i>		TCX-1-4102	REV. 3	09-01-94

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REF. 1-4102 H1, C415
 H2 : S1-2-089-401-C415
 H3 : S1-2-089-403-C415
 H4 : S1-2-089-406-C415
 H5 : S1-2-089-405-C415
 H6 : S1-2-089-404-C415

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: SAFETY INJECTION

T/SCH: 16".719"/160, (2)".344"/160

BRP: S1-2-RB-045, S1-2-RB-066

FLOW: M2-0262, M2-0263

TU ELECTRIC
 CPSES UNIT 2

INSERVICE INSPECTION
 LOCATION ISOMETRIC

APPROVAL: *RB May BS May 9-194*

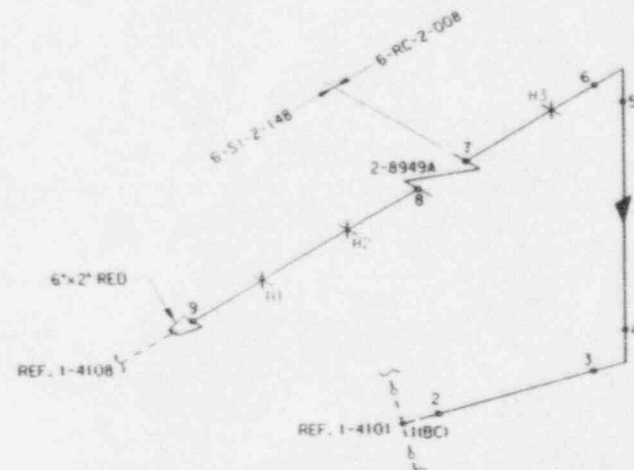
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REV. 3

09-01-94

TCX141033.151

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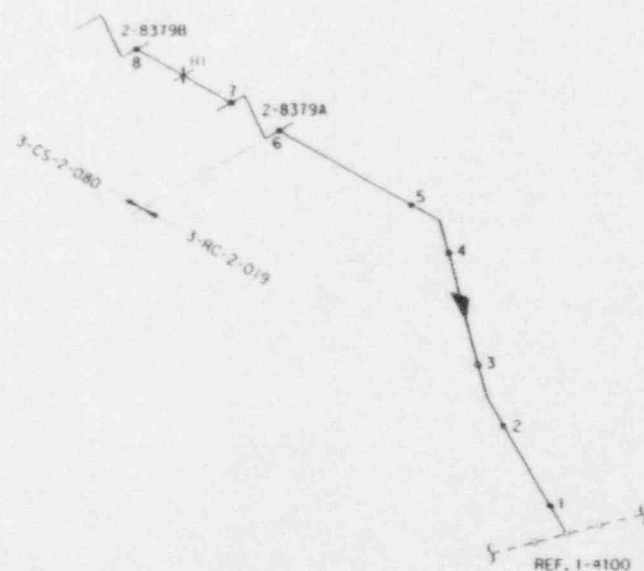
H1 : SI-2-148-402-C41K
H2 : SI-2-148-403-C41R
H3 : RC-2-008-402-C41S

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: SAFETY INJECTION/REACTOR COOLANT	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (6").719"/160			
		INSERVICE INSPECTION LOCATION ISOMETRIC		
	BRP: RC-2-RB-019, SI-2-RB-061			
APPROVAL: <i>RBA/ays RBA/ays 9-1-94</i>	FLOW: M2-0250, M2-0263	TCX-1-4104	REV. 1	09-01-94

TCX141041,151

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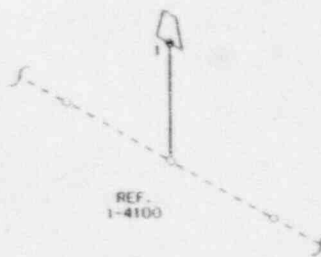
RT 1 CS-2-080-001-045

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: CS/RC ALTERNATE CHARGING	TU ELECTRIC		
	T/SCH: (3*).438*/160			
	BRP: RC-2-RB-017, CS-2-RB-029	CPSES UNIT 2		
		INSERVICE INSPECTION LOCATION ISOMETRIC		
APPROVAL: <i>RB Rys</i> <i>AS/ry</i> <i>9-1-94</i>	FLOW: M2-0250, M2-0253	TCX-1-4105	REV. 1	09-01-94

TCX141051.151

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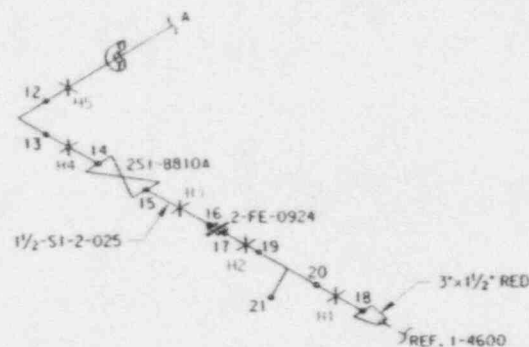
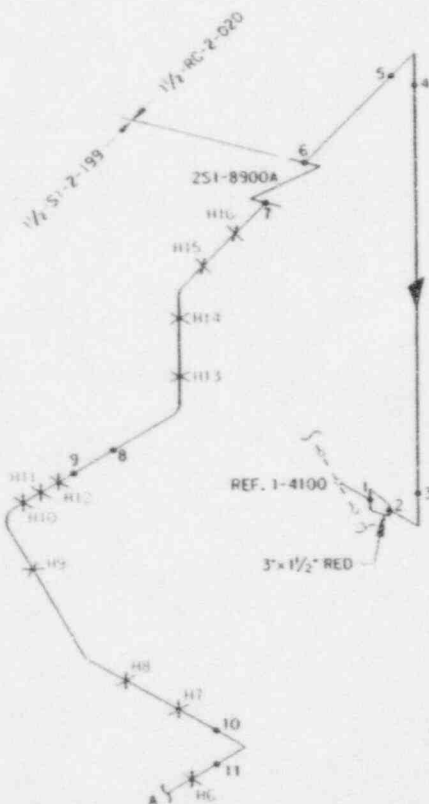


ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: REACTOR COOLANT RTD RETURN	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (3") 438°/160			
	BRP: RC-2-RB-029	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FLOW: M2-0250			
APPROVAL: <i>RB May 10 May 9-1-94</i>	TCX-1-4106	REV. 1	09-01-94	

TCX141061.1SJ

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- H1 : H-SI-2-RB-049-004-1
- H2 : H-SI-2-RB-049-005-1
- H3 : H-SI-2-RB-049-006-1
- H4 : H-SI-2-RB-049-007-1
- H5 : H-SI-2-RB-049-008-1
- H6 : H-SI-2-RB-049-009-1
- H7 : H-SI-2-RB-049-010-1
- H8 : H-SI-2-RB-049-011-1
- H9 : H-SI-2-RB-049-012-1
- H10 : H-SI-2-RB-049-013-1
- H11 : H-SI-2-RB-049-014-1
- H12 : H-SI-2-RB-049-015-1
- H13 : H-SI-2-RB-049-016-1
- H14 : H-SI-2-RB-049-017-1
- H15 : H-SI-2-RB-049-018-1
- H16 : H-SI-2-RB-049-019-1

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: SAFETY INJECTION/REACTOR COOLANT

T/SCH: (3", 438"/160, (1.5", 281"/160

BRP: RC-2-RB-018, SI-2-RB-048, SI-2-RB-049

FLOW: M2-0250, M2-0261

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *DB/ays B/ey 9/94*

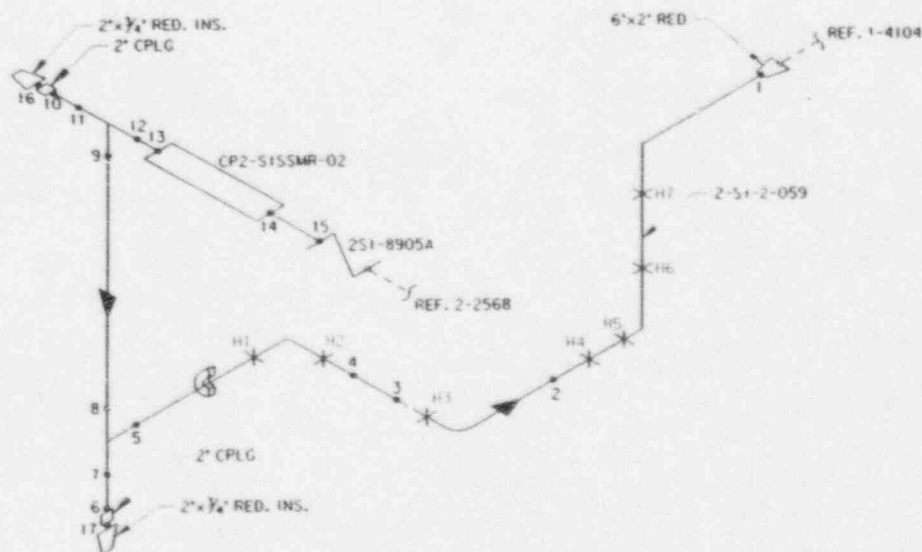
TCX-1-4107

REV. 2

09-01-94

TCX141072,151

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H1 : H-S1-2-RB-061-701-1
H2 : H-S1-2-RB-061-702-1
H3 : H-S1-2-RB-061-703-1
H4 : H-S1-2-RB-061-704-1
H5 : H-S1-2-RB-061-705-1
H6 : H-S1-2-RB-061-706-1
H7 : H-S1-2-RB-061-707-1

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: SAFETY INJECTION

T/SCH: (2").344"/160

BRP: S1-2-RB-039, S1-2-RB-061

FLOW: M2-0263

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB May RB May 5-1-94*

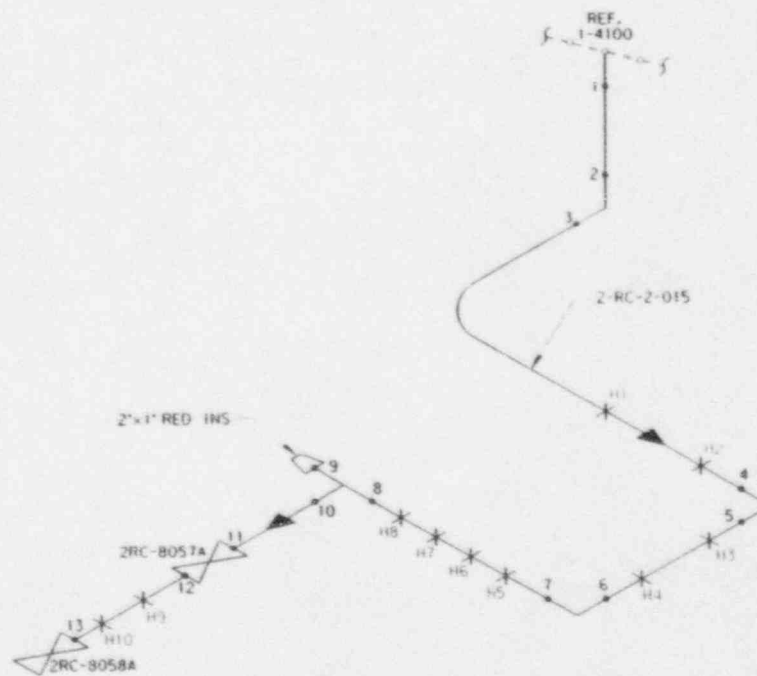
TCX-1-4108

REV. 2

09-01-94

TCX14108.1151

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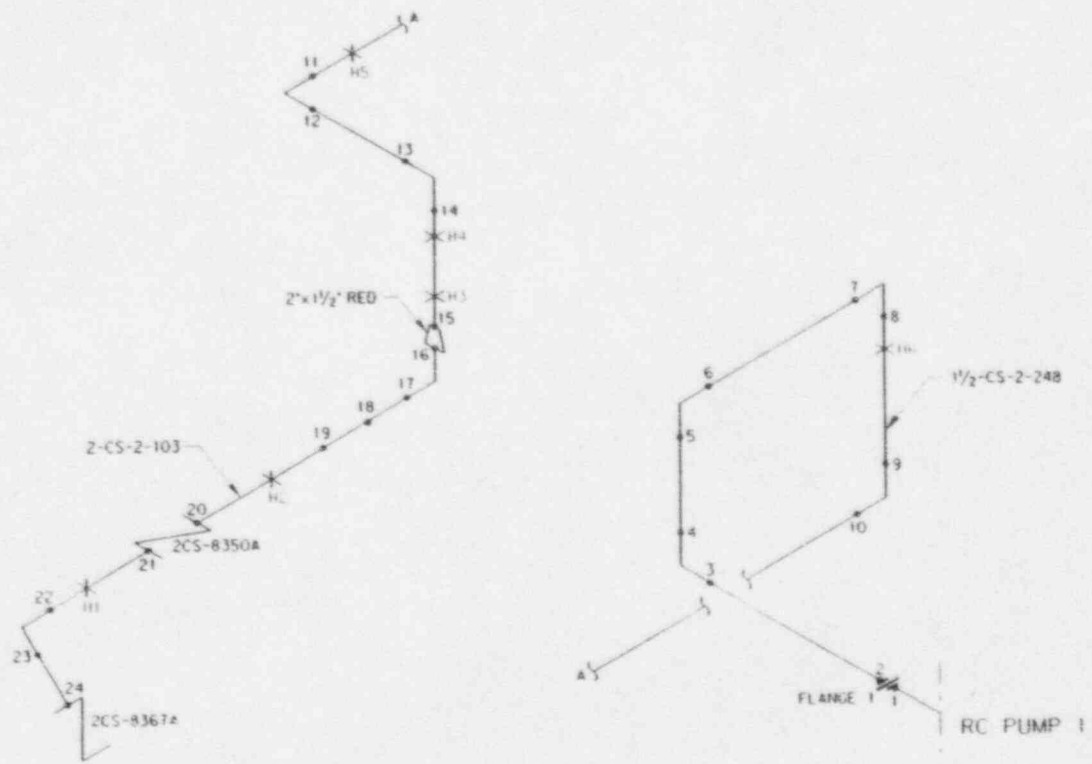


- H1 : H-RC-2-RB-027-701-1
- H2 : H-RC-2-RB-027-702-1
- H3 : H-RC-2-RB-027-703-1
- H4 : H-RC-2-RB-027-704-1
- H5 : H-RC-2-RB-027-705-1
- H6 : H-RC-2-RB-027-706-1
- H7 : H-RC-2-RB-027-707-1
- H8 : H-RC-2-RB-027-708-1
- H9 : H-RC-2-RB-027-710-1
- H10 : H-RC-2-RB-027-711-1

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: REACTOR COOLANT	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (2").344"/160			
	BRP: RC-2-RB-027	INSERVICE INSPECT,ON LOCATION ISOMETRIC		
	FLOW: M2-0250			
APPROVAL: <i>RB Mays RB Mays 5-1-94</i>		TCX-1-4109	REV. 1	09-01-94

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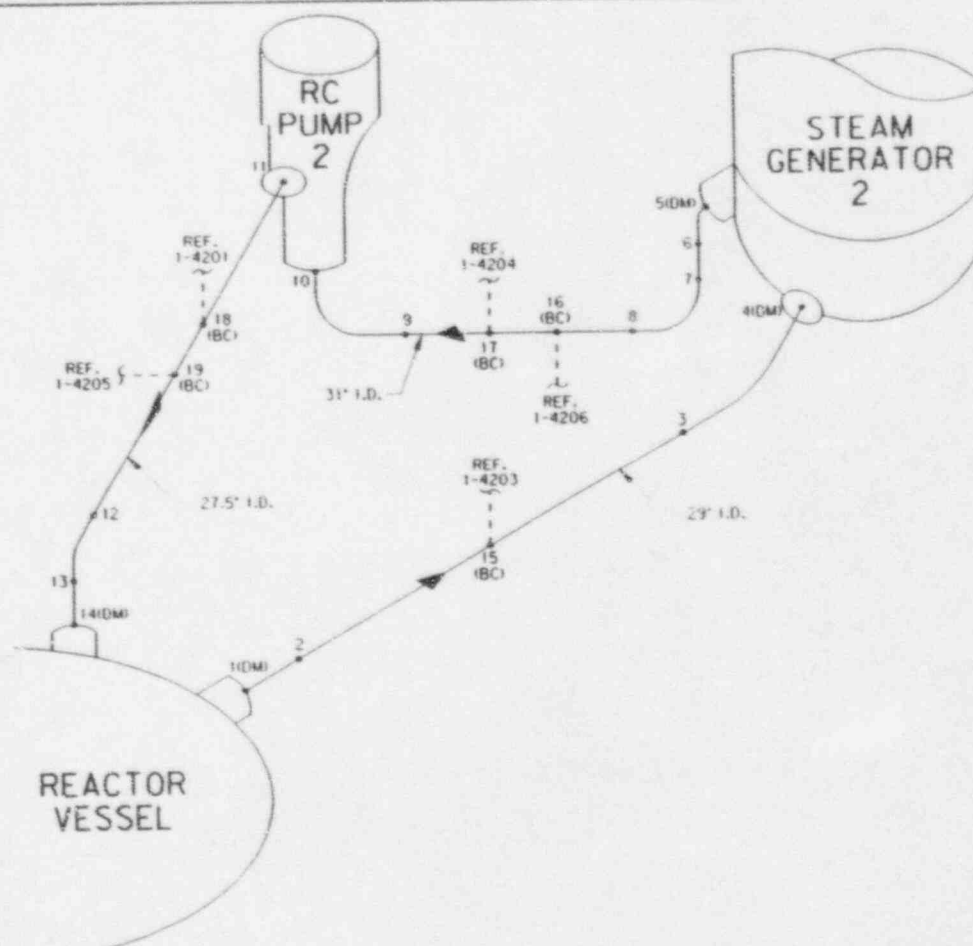
- H1 = H-C-S-2-RB-037A-701-1
- H2 = H-C-S-2-RB-037A-702-1
- H3 = H-C-S-2-RB-037A-703-1
- H4 = H-C-S-2-RB-037A-704-1
- H5 = H-C-S-2-RB-037A-705-1
- H6 = H-C-S-2-RB-037A-706-1

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: CS SEAL INJECTION	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (2').344"/160, (1.5').281"/160			
		INSERVICE INSPECTION LOCATION ISOMETRIC		
	BRP: CS-2-RB-037A, CS-2-RB-037B			
APPROVAL: <i>R.B. Mays B.M. May 9-1-94</i>	FLOW: M2-0253	TCX-1-4110	REV. 1	09-01-94

TCX141101451

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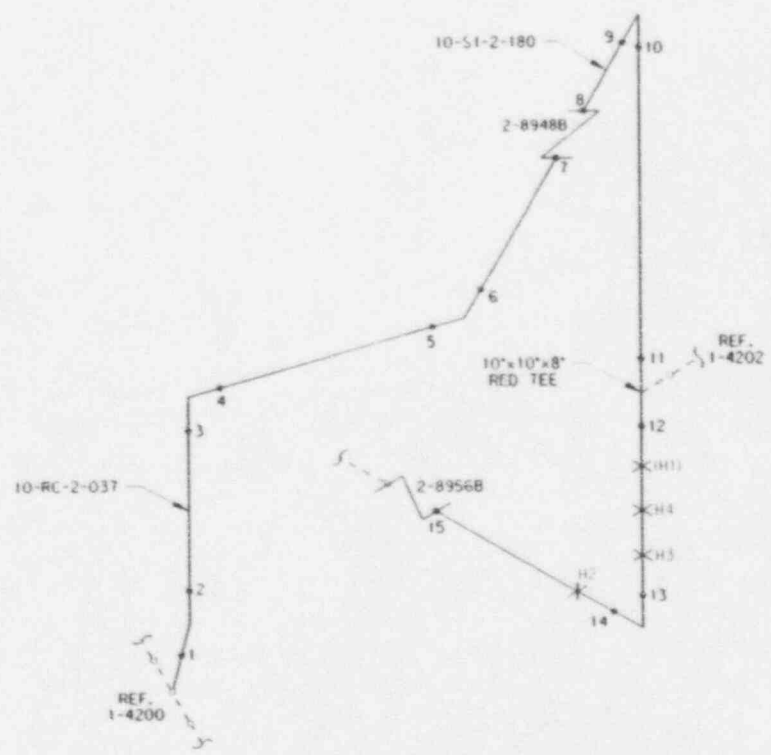


ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: REACTOR COOLANT LOOP 2	TU ELECTRIC		
	T/SCH: (31")2.48", (29")2.33", (27.5")2.21"			
	SA-351-CF8A	CPSES UNIT 2		
	BRP: RC-2-520-001	INSERVICE INSPECTION		
APPROVAL: <i>RR Mays 9-1-94</i>	FLOW: M2-0250	LOCATION ISOMETRIC		
		TCX-1-4200	REV. 1	09-01-94

TCX142001, ISI

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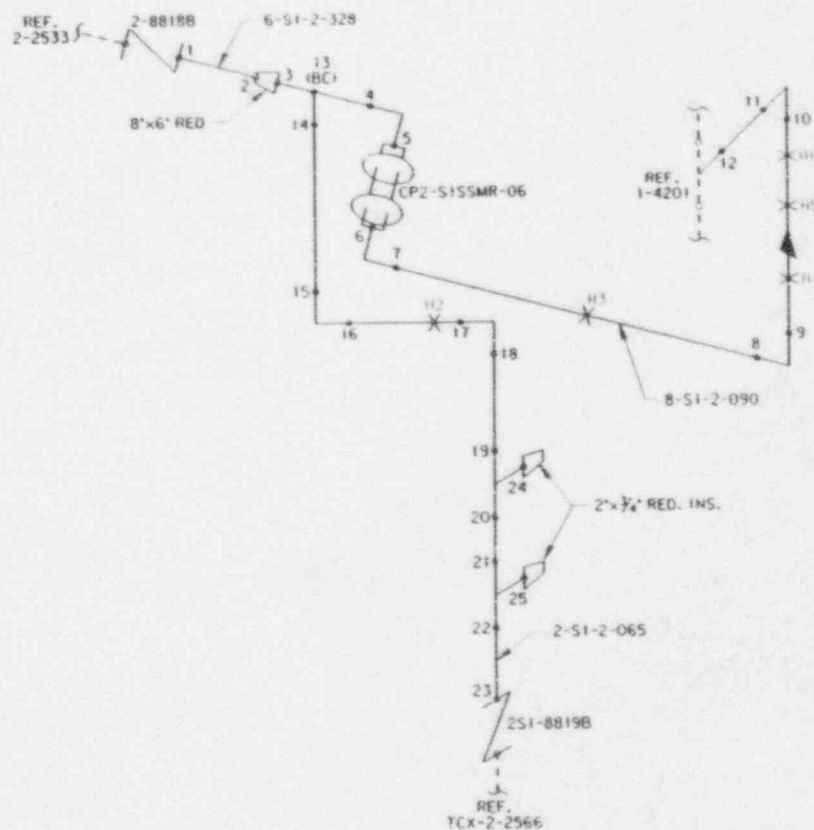


REF. 1-4200
H1 : SI-2-180-401-C41R
H2 : SI-2-180-401-C41R
H3 : SI-2-180-403-C41R
H4 : SI-2-180-404-C41R

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: SAFETY INJECTION/REACTOR COOLANT	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (10")1.00"/140			
	BRP: RC-2-RB-065, SI-2-RB-075	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FLOW: M2-0250, M2-0262			
APPROVAL: <i>RB May 91/94</i>		TCX-1-4201	REV. 3	09-01-94

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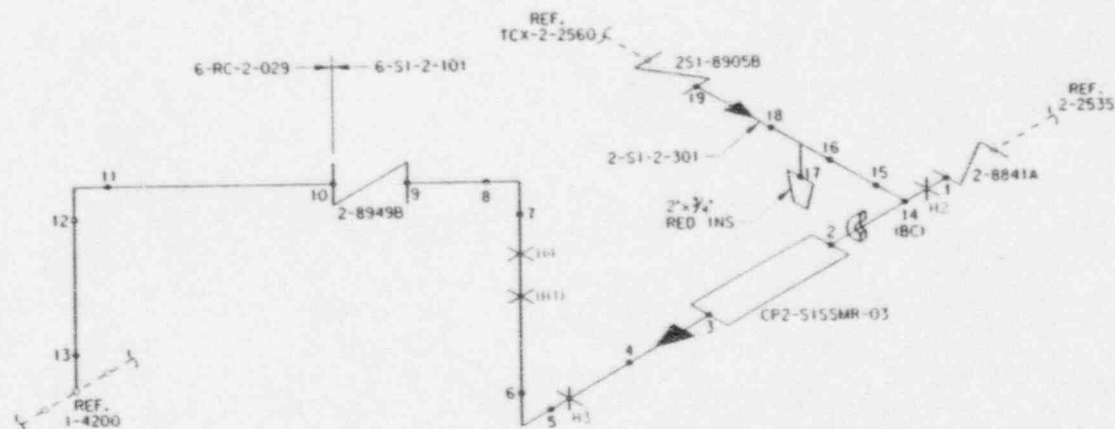


- H1 : SI-2-090-402-C415
- H2 : H-SI-2-RB-010C-701-1
- H3 : SI-2-090-403-C41K
- H4 : SI-2-090-404-C41K
- H5 : SI-2-090-405-C41K

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: SAFETY INJECTION	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (8").906"/160, (6").719"/160, (2").344"/160			
	BRP: SI-2-RB-010C, SI-2-RB-026, SI-2-RB-028	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FLOW: M2-0262, M2-0263			
APPROVAL: <i>RB May 8/10/94</i>		TCX-1-4202	REV. 4	09-01-94

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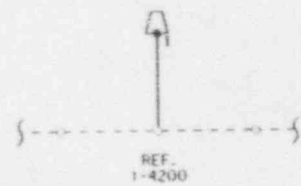


001 : SI-2-101-403-C41R
R2 : SI-2-101-407-C41R
H3 : SI-2-101-408-C41R
H4 : SI-2-101-409-C41R

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: SAFETY INJECTION/REACTOR COOLANT	TU ELECTRIC CPSES UNIT 2		
	T/SCH: 16".719"/160, (2)".344"/160			
	BRP: RC-2-RB-044, SI-2-RB-019, SI-2-RB-014B	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FLOW: M2-0250, M2-0263			
APPROVAL: <i>RB May 9.1.94</i>		TCX-1-4203	REV. 3	09-01-94

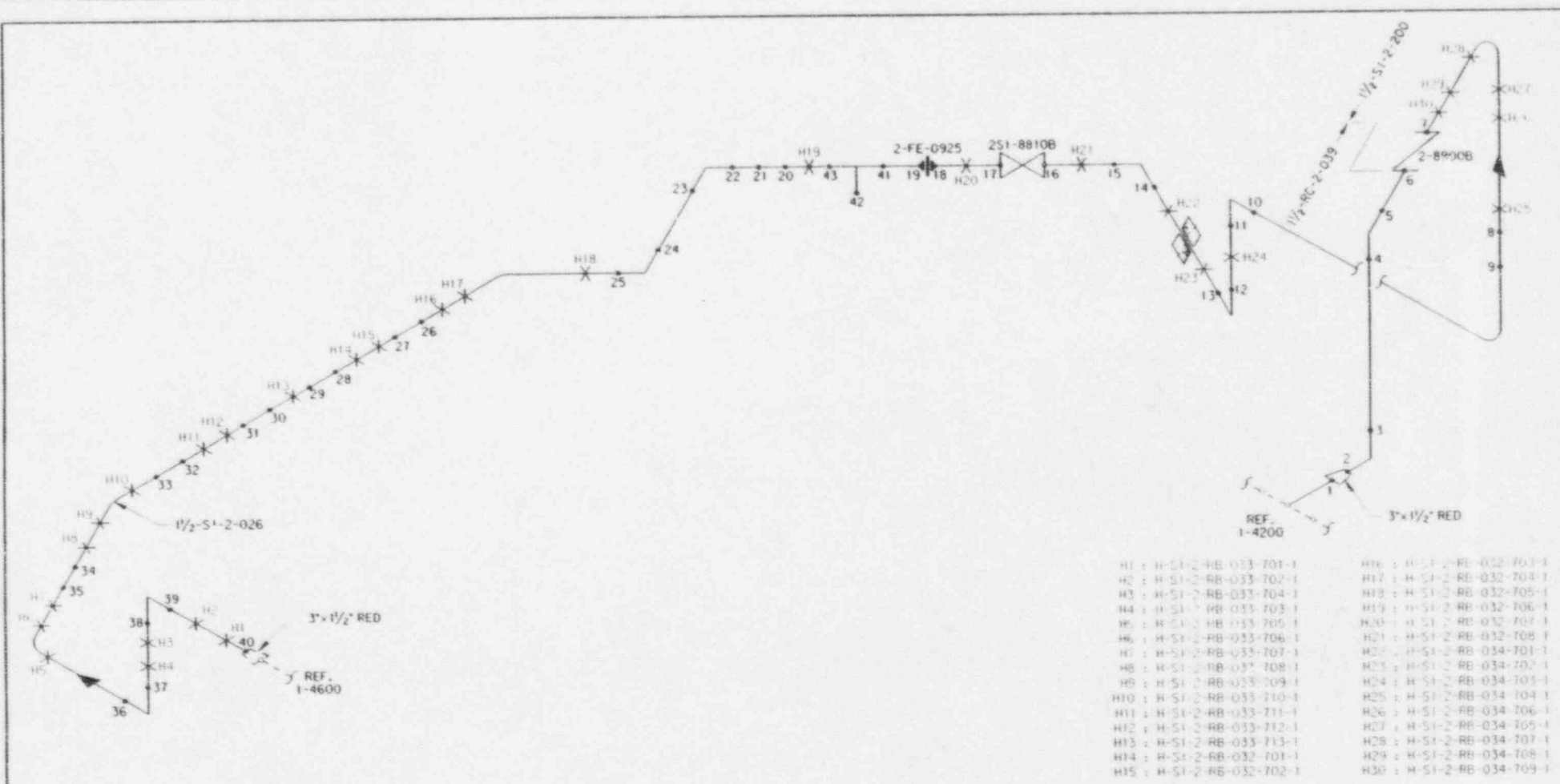
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ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: REACTOR COOLANT RTD RETURN	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (3")L438"/160			
	BRP: RC-2-RB-055	INSERVICE INSPECTION LOCATION ISOMETRIC		
APPROVAL: <i>RB Noy</i> <i>2-1-94</i>	FLOW: M2-0250	TCX-1-4204	REV. 1	09-01-94

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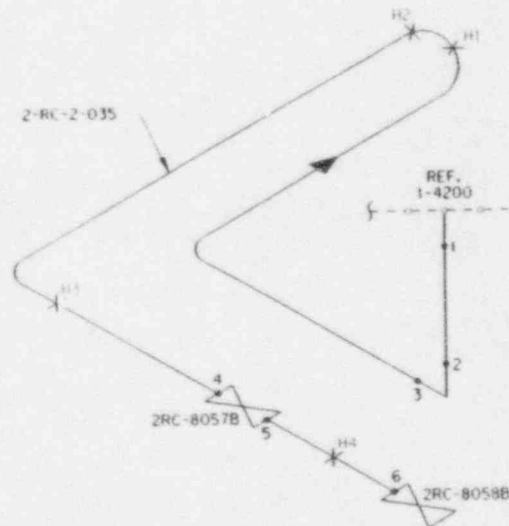


- | | |
|---------------------------|---------------------------|
| H1 : H-SI-2-RB-033-701-1 | H16 : H-SI-2-RB-032-703-1 |
| H2 : H-SI-2-RB-033-702-1 | H17 : H-SI-2-RB-032-704-1 |
| H3 : H-SI-2-RB-033-704-1 | H18 : H-SI-2-RB-032-705-1 |
| H4 : H-SI-2-RB-033-703-1 | H19 : H-SI-2-RB-032-706-1 |
| H5 : H-SI-2-RB-033-705-1 | H20 : H-SI-2-RB-032-707-1 |
| H6 : H-SI-2-RB-033-706-1 | H21 : H-SI-2-RB-032-708-1 |
| H7 : H-SI-2-RB-033-707-1 | H22 : H-SI-2-RB-034-701-1 |
| H8 : H-SI-2-RB-033-708-1 | H23 : H-SI-2-RB-034-702-1 |
| H9 : H-SI-2-RB-033-709-1 | H24 : H-SI-2-RB-034-703-1 |
| H10 : H-SI-2-RB-033-710-1 | H25 : H-SI-2-RB-034-704-1 |
| H11 : H-SI-2-RB-033-711-1 | H26 : H-SI-2-RB-034-706-1 |
| H12 : H-SI-2-RB-033-712-1 | H27 : H-SI-2-RB-034-705-1 |
| H13 : H-SI-2-RB-033-713-1 | H28 : H-SI-2-RB-034-707-1 |
| H14 : H-SI-2-RB-032-701-1 | H29 : H-SI-2-RB-034-708-1 |
| H15 : H-SI-2-RB-032-702-1 | H30 : H-SI-2-RB-034-709-1 |

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: SAFETY INJECTION/REACTOR COOLANT	TU ELECTRIC		
	T/SCH: (3"), 438" / 160, (1.5"), 281" / 160			
		CPSES UNIT 2		
	BRP: RC-2-RB-058, SI-2-RB-032, SI-2-RB-033,			
	SI-2-RB-034	INSERVICE INSPECTION LOCATION ISOMETRIC		
APPROVAL: RB Mays RB Mays 9-1-94	FLOW: M2-0250, M2-0261	TCX-1-4205	REV. 2	09-01-94

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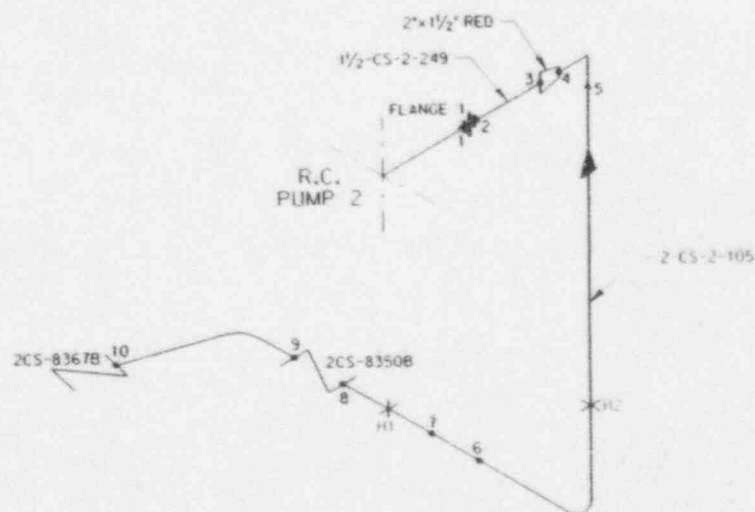


H1 : H-RC-2-RB-060-701-1
H2 : H-RC-2-RB-060-702-1
H3 : H-RC-2-RB-060-704-1
H4 : H-RC-2-RB-060-705-1

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: REACTOR COOLANT	TU ELECTRIC CPSES UNIT 2		
	T/SCH: 12"1.344"/160			
	BFP: RC-2-RB-060	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FLOW: M2-0250			
APPROVAL: <i>RB Mays RB Mays 9-1-94</i>		TCX-1-4206	REV. 1	09-01-94

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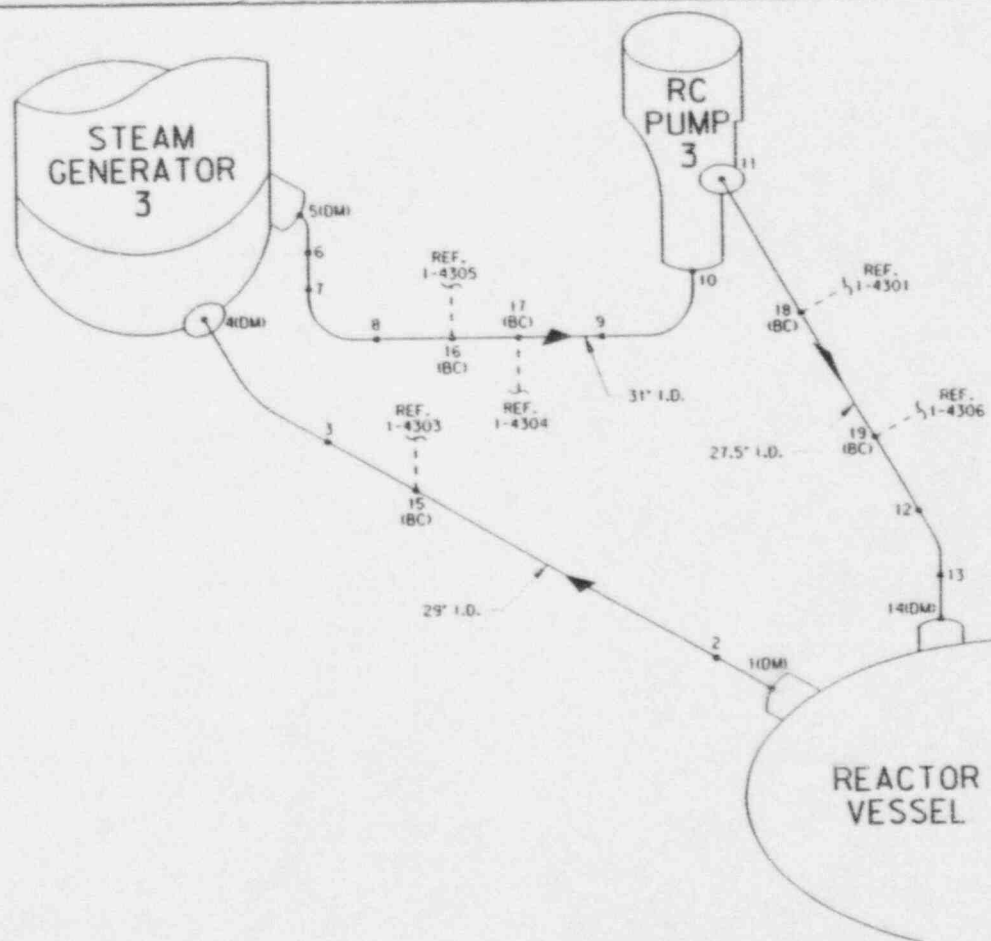


H1 : H-CS-2-RB-002-704-1
H2 : H-CS-2-RB-002-705-1

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: CS SEAL INJECTION	TU ELECTRIC		
	T/SCH: (12") 3.44" / 160, (1.5") 2.81" / 160			
	BRP: CS-2-RB-002	CPSES UNIT 2		
APPROVAL: <i>ERM</i> <i>RM</i> 8.1.94	FLOW: M2-0253	TCX-1-4207	REV. 1	09-01-94

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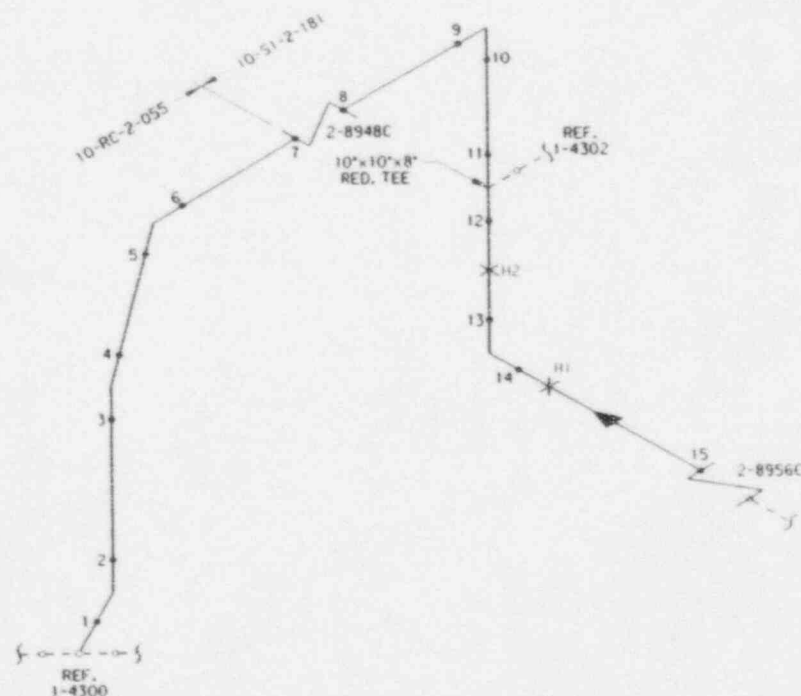


ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: REACTOR COOLANT LOOP 3	TU ELECTRIC		
	T/SCH: (31")2.48", (29")2.33", (27.5")2.21"			
	SA-351-CF8A	CPSES UNIT 2		
	BRP: RC-2-520-001	INSERVICE INSPECTION		
		LOCATION ISOMETRIC		
APPROVAL: <i>RB May RB May 9-1-94</i>	FLOW: M2-0250	TCX-1-4300	REV. 1	09-01-94

TCX143001.1S1

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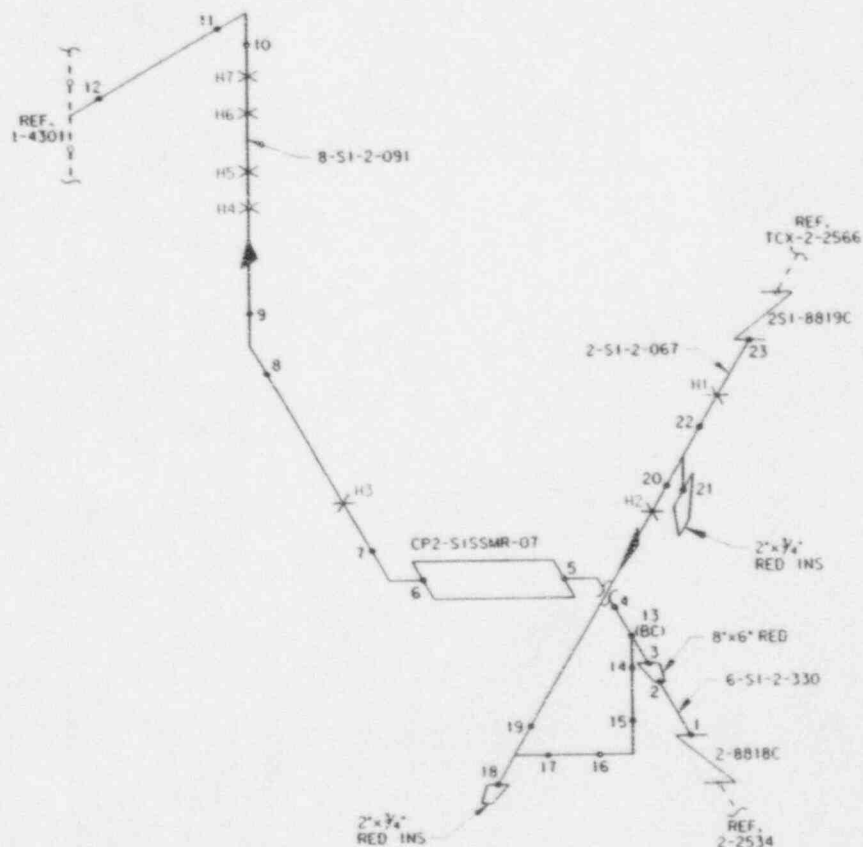
H1 : SI-2-181-402-C41R
H2 : SI-2-181-403-C41R

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: SAFETY INJECTION/REACTOR COOLANT	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (110")1.00"/140			
	BRP: RC-2-RB-062, SI-2-RB-078	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FLOW: M2-0250, M2-0262			
APPROVAL: <i>RB Mays</i> 7-1-94		TCX-1-4301	REV. 2	09-01-94

TCX143012,151

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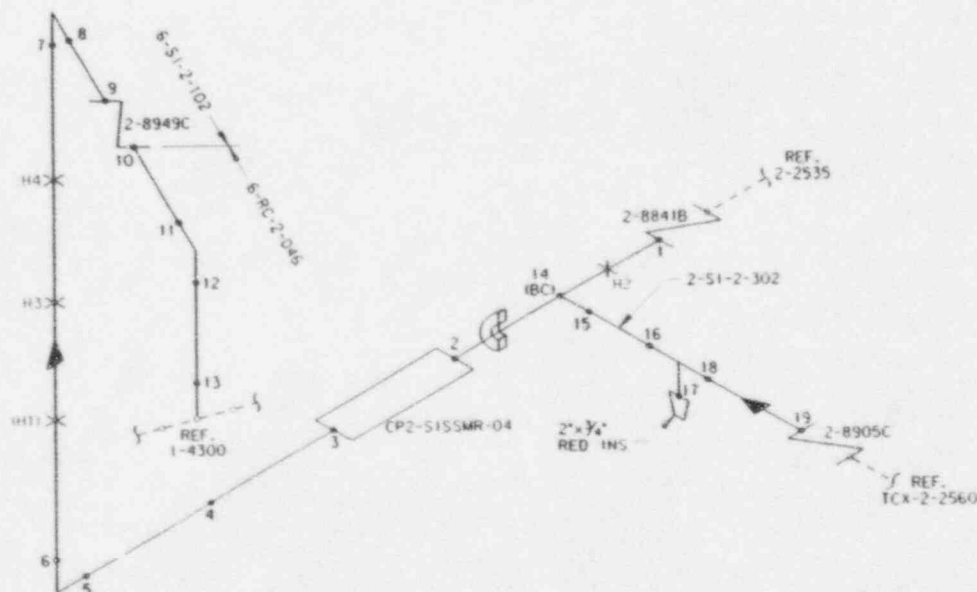


- H1 : H-S1-2-RB-010A-T-5-1
- H2 : H-S1-2-RB-010A-706-1
- H3 : S1-2-091-401-C41R
- H4 : S1-2-091-406-C41R
- H5 : S1-2-091-407-C41R
- H6 : S1-2-091-409-C41R
- H7 : S1-2-091-408-C41R

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: SAFETY INJECTION	TU ELECTRIC CPSES UNIT 2		
	T/SCH: 18".906"/160, (6)".719"/160, (2)".344"/160			
	BRP: S1-2-RB-010A, S1-2-RB-013, S1-2-RB-021	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FLOW: M2-0262, M2-0263			
APPROVAL: <i>RB May RB May 9-1-94</i>		TCX-1-4302	REV. 2	09-01-94

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H1: SI-2-102-403-C41
H2: SI-2-102-407-C41R
H3: SI-2-102-410-C41R
H4: SI-2-102-403-C41

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: SAFETY INJECTION/REACTOR COOLANT	TU ELECTRIC		
	T/SCH: 16", 719"/160, 12", 344"/160			
	BRP: RC-2-RB-045, SI-2-RB-014B, SI-2-RB-018	CPSES UNIT 2		
	FLOW: M2-0250, M2-0263	INSERVICE INSPECTION LOCATION ISOMETRIC		
APPROVAL: <i>ZB May 10 May 9-1-94</i>		TCX-1-4303	REV. 4	09-01-94

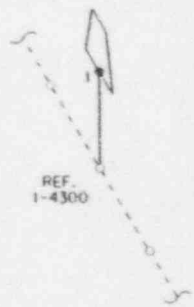
- H1: RC = 2.052 404-C41R
H2: RC = 2.052 408-C41R
H3: RC = 2.052 402-C41R
H4: RC = 2.052 428-C41R
H5: RC = 2.052 405-C41R
H6: RC = 2.052 409-C41R
H7: RC = 2.052 410-C41R
H8: RC = 2.052 406-C41R
H9: RC = 2.052 407-C41R
H10: RC = 2.052 411-C41R
H11: RC = 2.052 425-C41R
H12: RC = 2.052 426-C41R
H13: RC = 2.052 415-C41R
H14: RC = 2.052 418-C41R
H15: RC = 2.052 418-C41R
H16: RC = 2.052 420-C41R
H17: RC = 2.052 421-C41R
H18: RC = 2.052 423-C41R
H19: RC = 2.052 422-C41R
H20: RC = 2.052 424-C41R
H21: RC = 2.052 419-C41R
H22: RC = 2.052 429-C41R
H23: CS = 2.235 467-C41R
H24: CS = 2.35 426-C41R

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: RC/CS LETDOWN	TU ELECTRIC				
	T/SCH: (3") 438"/160					
	BRP: RC-2-RB-061,CS-2-RB-076	CPSSES UNIT 2				
APPROVAL: <i>28 Nov 1994</i>	FLOW: M2-0250,M2-0253	INSERVICE INSPECTION	LOCATION ISOMETRIC	TCX-1-4304	REV. 1	09-01-94

TCX143041.FSI

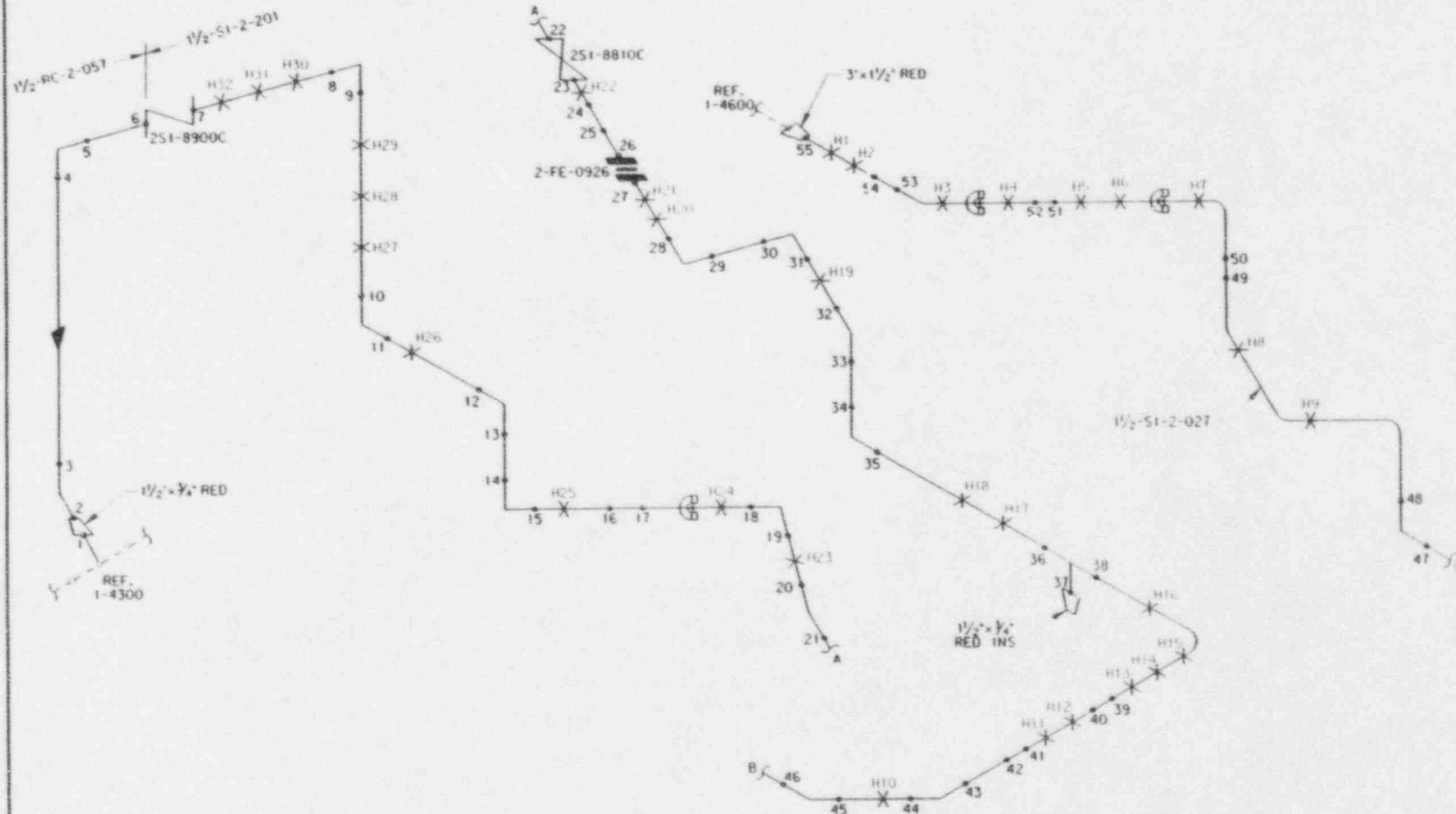
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ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: REACTOR COOLANT RTD RETURN	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (3") 438"/160			
	BRP: RC-2-RB-052	INSERVICE INSPECTION LOCATION ISOMETRIC		
APPROVAL: <i>ZB May 1 BS May 9-194</i>	FLOW: M2-0250	TCX-1-4305	REV. 1	09-01-94

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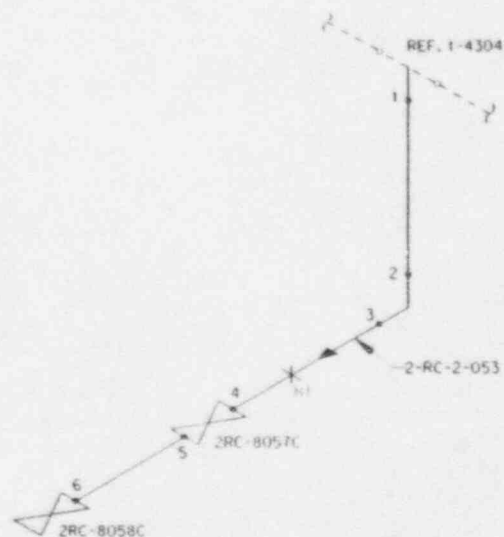


- H1 : H-SI-2-RB-008-701-1
- H2 : H-SI-2-RB-008-702-1
- H3 : H-SI-2-RB-008-704-1
- H4 : H-SI-2-RB-008-706-1
- H5 : H-SI-2-RB-008-707-1
- H6 : H-SI-2-RB-008-708-1
- H7 : H-SI-2-RB-008-709-1
- H8 : H-SI-2-RB-008-710-1
- H9 : H-SI-2-RB-008-712-1
- H10 : H-SI-2-RB-008-714-1
- H11 : H-SI-2-RB-007-701-1
- H12 : H-SI-2-RB-007-702-1
- H13 : H-SI-2-RB-007-703-1
- H14 : H-SI-2-RB-007-704-1
- H15 : H-SI-2-RB-007-705-1
- H16 : H-SI-2-RB-007-706-1
- H17 : H-SI-2-RB-007-707-1
- H18 : H-SI-2-RB-007-708-1
- H19 : H-SI-2-RB-007-709-1
- H20 : H-SI-2-RB-007-710-1
- H21 : H-SI-2-RB-007-711-1
- H22 : H-SI-2-RB-007-712-1
- H23 : H-SI-2-RB-007-713-1
- H24 : H-SI-2-RB-009-701-1
- H25 : H-SI-2-RB-009-702-1
- H26 : H-SI-2-RB-009-703-1
- H27 : H-SI-2-RB-009-705-1
- H28 : H-SI-2-RB-009-706-1
- H29 : H-SI-2-RB-009-707-1
- H30 : H-SI-2-RB-009-708-1
- H31 : H-SI-2-RB-009-710-1
- H32 : H-SI-2-RB-009-709-1

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: SAFETY INJECTION/REACTOR COOLANT	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (3'),.438"/160, (1.5'),.281"/160			
	BRP: RC-2-RB-059, SI-2-RB-007, SI-2-RB-008, SI-2-RB-009	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FLOW: M2-0250, M2-0261			
APPROVAL: <i>RB May RB May 7-1-94</i>		TCX-1-4306	REV. 1	09-01-94

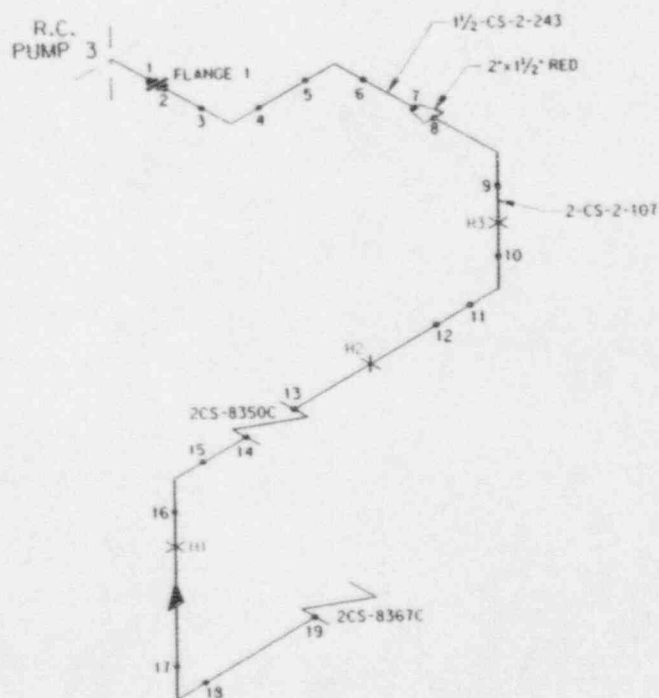
36/134



REV. 1 RC 2 RB OUT FOR 1

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: REACTOR COOLANT	TU ELECTRIC CPSES UNIT 2 INSERVICE INSPECTION LOCATION ISOMETRIC		
	T/SCH: (2").344"/160			
	BRP: RC-2-RB-061			
APPROVAL: <i>RB/Op RB/Op 4-1-94</i>	FLOW: M2-0250	TXC-1-4307	REV. 1	09-01-94



H1 : H-CS-2-RB-013-203-1
H2 : H-CS-2-RB-013-204-1
H3 : H-CS-2-RB-013-202-1

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: CS SEAL INJECTION

T/SCH: (2").344"/160, (1.5").281"/160

BRP: CS-2-RB-013

FLOW: M2-0253

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

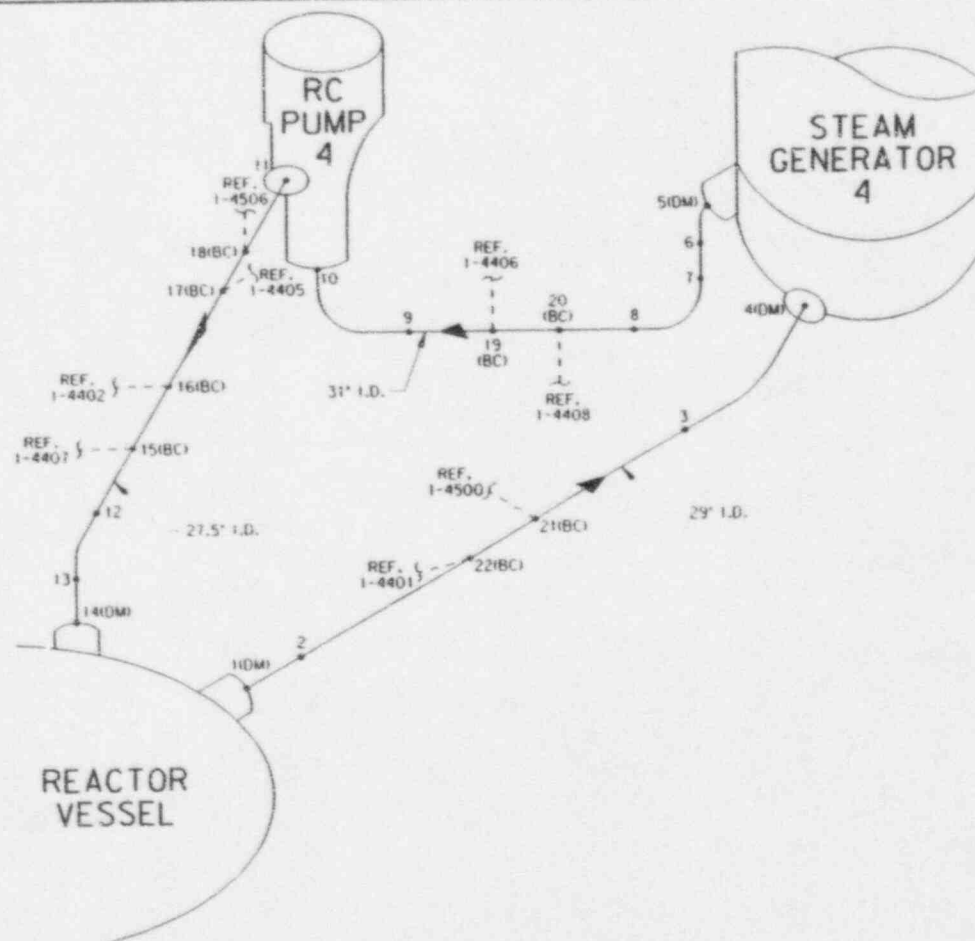
APPROVAL: *R May, 8/2/94*

TCX-1-4308

REV. 1

09-01-94

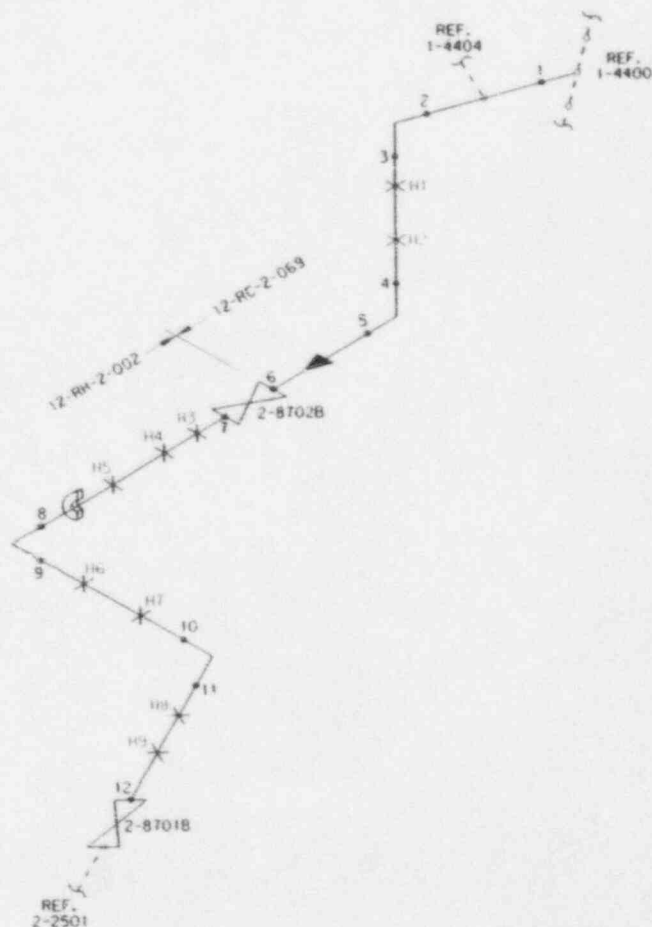
38/134



ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: REACTOR COOLANT LOOP 4	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (31")2.48", (29")2.33", (27.5")2.21"			
	SA-351-CF8A	INSERVICE INSPECTION LOCATION ISOMETRIC		
	BRP: RC-2-520-001			
APPROVAL: <i>RB Macs RB Macs 9-1-94</i>	FLOW: M2-0250	TCX-1-4400	REV. 1	09-01-94

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- H1 : RC-2-063-401-C41R
- H2 : RC-2-063-402-C41R
- H3 : RH-2-002-404-C41R
- H4 : RH-2-002-408-C41R
- H5 : RH-2-002-407-C41R
- H6 : RH-2-002-402-C41R
- H7 : RH-2-002-406-C41R
- H8 : RH-2-002-405-C41R
- H9 : RH-2-002-401-C41R

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: REACTOR COOLANT/RHR

T/SCH: (12")1.125"/140

BRP: RC-2-RB-021, RH-2-RB-002, RH-2-RB-004

FLOW: M2-0250, M2-0260

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

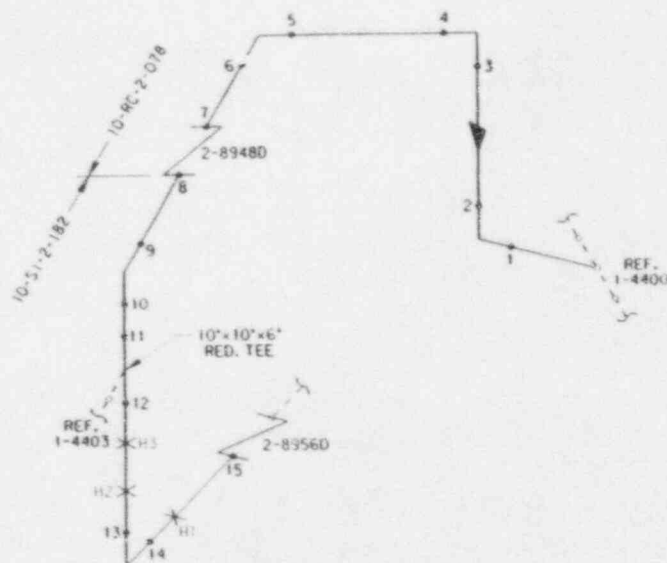
APPROVAL: *RB May QB May 9-1-94*

TCX-1-4401

REV. 1

09-01-94

40/134



H1 : 51-2-182-402-C41R
H2 : 51-2-182-403-C41R
H3 : 51-2-182-402-C41R

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: SAFETY INJECTION/REACTOR COOLANT

T/SCH: (10")1.00"/140

BRP: RC-2-RB-032, SI-2-RB-070

FLOW: M2-0250, M2-0262

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB/Mop RB/Mop 9.1.94*

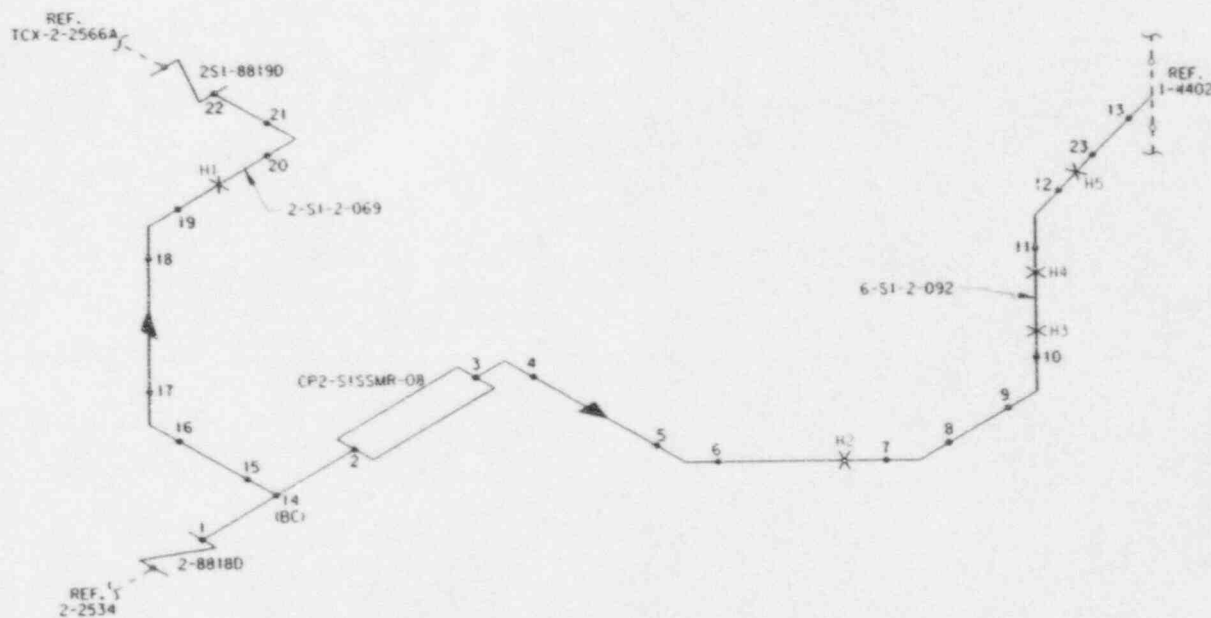
TCX-1-4402

REV. 2

09-01-94

TCX144022.VSI

41/134



H1 = S1-2-092-404-C419
H2 = S1-2-092-404-C419
H3 = S1-2-092-405-C419
H4 = S1-2-092-406-C419
H5 = S1-2-092-403-C415

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: SAFETY INJECTION

T/SCH: (6") 7.19"/160, (2") 3.44"/160

BRP: S1-2-RB-060

FLOW: M2-0262, M2-0263

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB May, JB May 2-1-94*

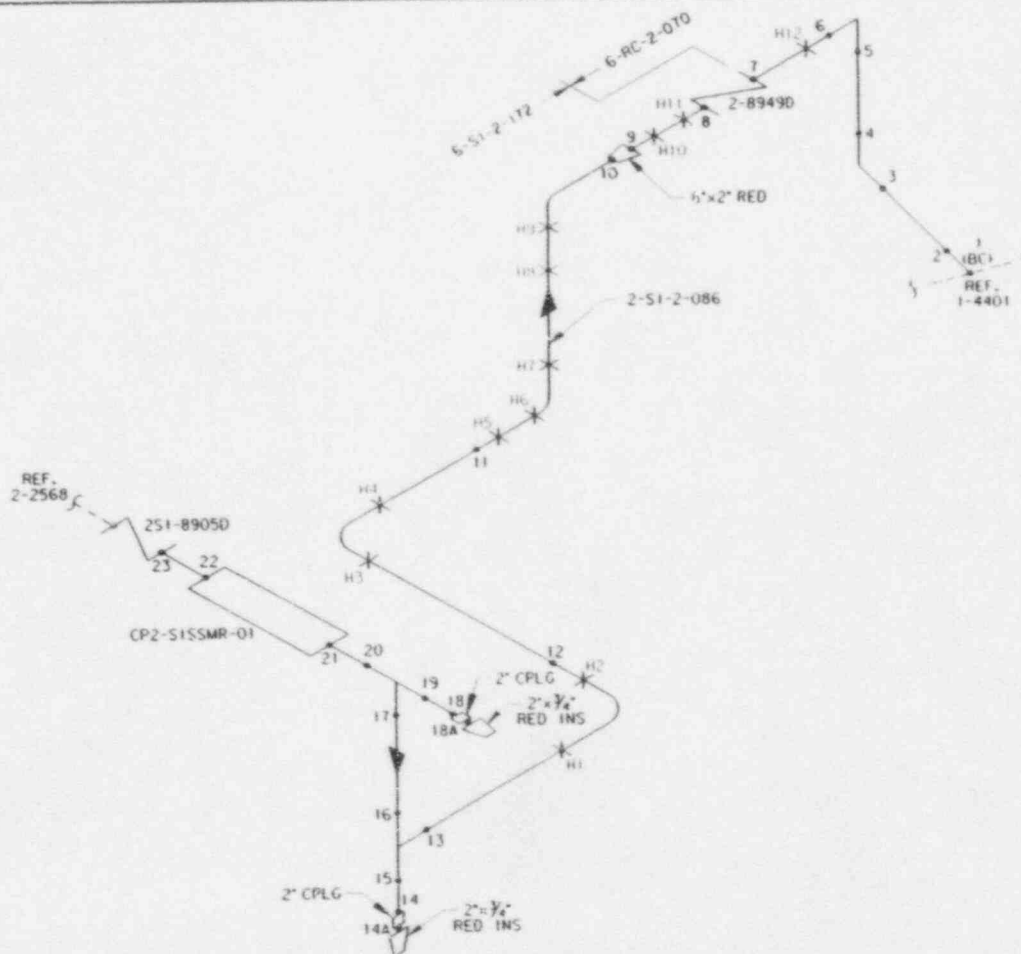
TCX-1-4403

REV. 2

09-01-94

TCX144032, IS1

42/134



- H1 : H-SI-2-RB-052 T01-1
- H2 : H-SI-2-RB-052 T02-1
- H3 : H-SI-2-RB-052 T03-1
- H4 : H-SI-2-RB-052 T04-1
- H5 : H-SI-2-RB-052 T05-1
- H6 : H-SI-2-RB-052 T06-1
- H7 : H-SI-2-RB-052 T07-1
- H8 : H-SI-2-RB-052 T08-1
- H9 : H-SI-2-RB-052 T09-1
- H10 : SI-2-172-402-C41K
- H11 : SI-2-172-403-C41R
- H12 : RC-2-(TO-402-C41S

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: SAFETY INJECTION/REACTOR COOLANT

T/SCH: (16").719"/160, (2").344"/160

BRP: RC-2-RB-019, SI-2-RB-042, SI-2-RB-052

FLOW: M2-0250, M2-0263

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB Mays* *CB May* 8-1-74

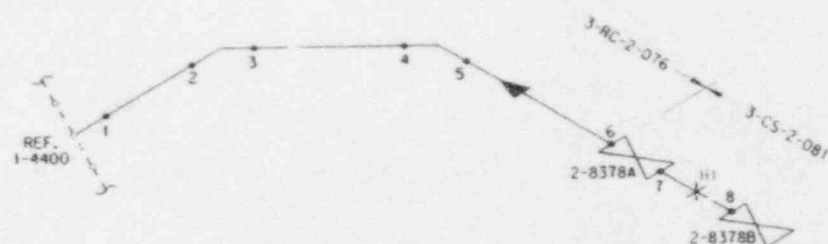
TCX-1-4404

REV. 2

09-01-94

TCX-144042.TS1

43/134

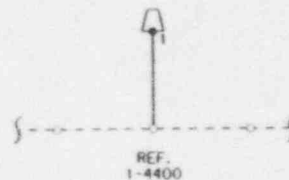


HT: CS-2-081-001 C415

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: RC/CS CHARGING	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (3")L438"/160			
	BRP: RC-2-RB-024, CS-2-RB-027	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FLOW: M2-0250, M2-0253			
APPROVAL: <i>RB May 13 May 7-1-94</i>		TCX-1-4405	REV. 1	09-01-94

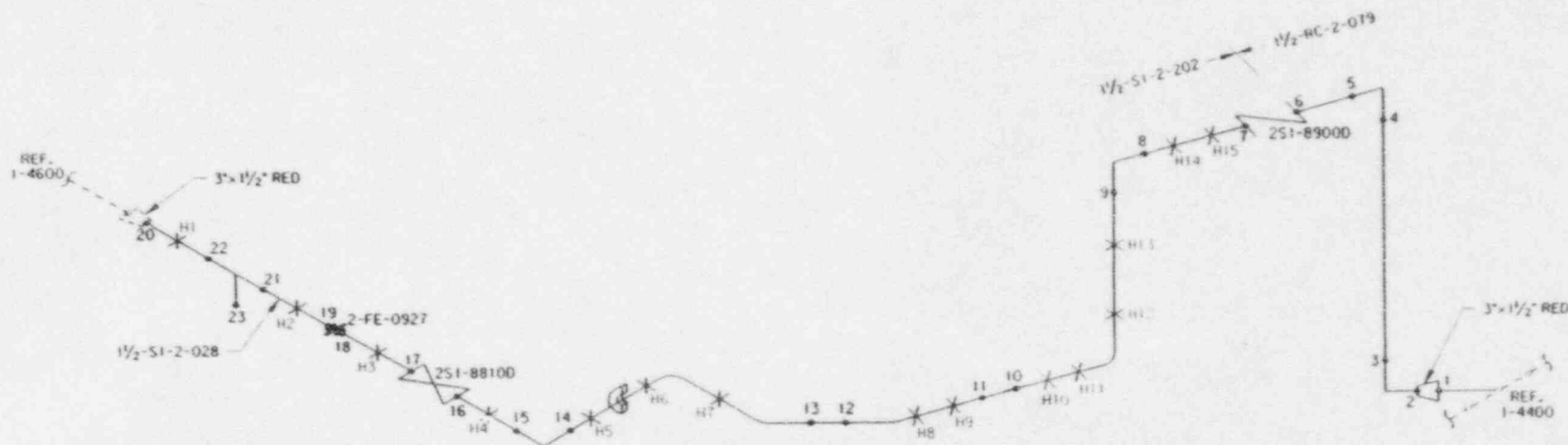
44/134



ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: REACTOR COOLANT RTD RETURN	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (3") 438°/160			
	BRP: RC-2-RB-035	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FLOW: M2-0250			
APPROVAL: <i>RB May, B May 7-1-94</i>		TCX-1-4406	REV. 1	09-01-94

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- H1 : H-SI-2-RB-048-705-1
- HC : H-SI-2-RB-048-706-1
- H3 : H-SI-2-RB-048-707-1
- H4 : H-SI-2-RB-048-708-1
- H5 : H-SI-2-RB-050-701-1
- H6 : H-SI-2-RB-050-702-1
- H7 : H-SI-2-RB-050-703-1
- H8 : H-SI-2-FS-050-704-1
- H9 : H-SI-2-RB-050-705-1
- H10 : H-SI-2-RB-050-706-1
- H11 : H-SI-2-RB-050-707-1
- H12 : H-SI-2-RB-050-708-1
- H13 : H-SI-2-RB-050-709-1
- H14 : H-SI-2-RB-050-710-1
- H15 : H-SI-2-RB-050-711-1

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: SAFETY INJECTION/REACTOR COOLANT

T/SCH: (3\"/>

BRP: RC-2-RB-022, SI-2-RB-048, SI-2-RB-050

FLOW: M2-0250, M2-0261

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RBA/ays BBA/ 7-1-94*

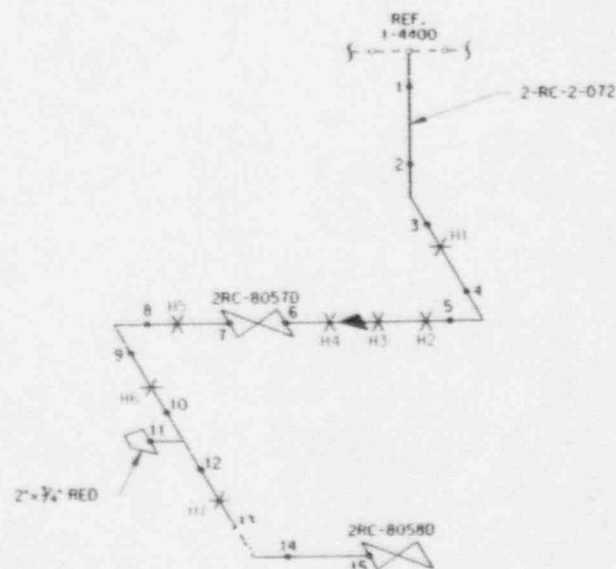
TCX-1-4407

REV. 2

09-01-94

TCX-144072-151

46/134



H1 : H-RC-2-RB-028-T01-1
H2 : H-RC-2-RB-028-T02-1
H3 : H-RC-2-RB-028-T03-1
H4 : H-RC-2-RB-028-T04-1
H5 : H-RC-2-RB-028-T05-1
H6 : H-RC-2-RB-028-T06-1
H7 : H-RC-2-RB-028-T07-1

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: REACTOR COOLANT

T/SCH: (2") 344"/160

BRP: RC-2-RB-028

FLOW: M2-0250

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL:

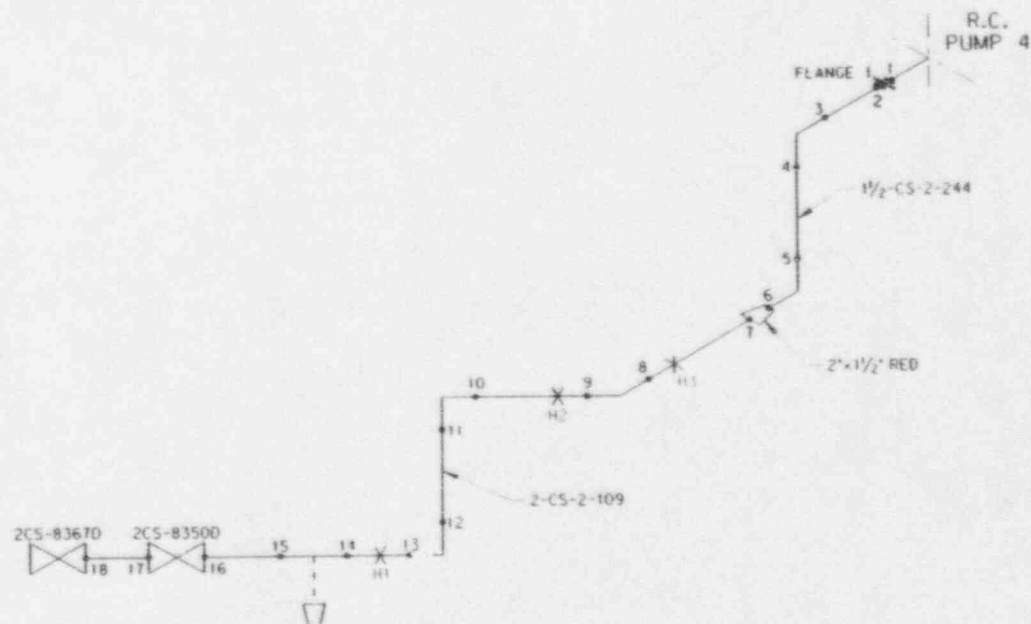
RB May ABN of 9/1/94

TCX-1-4408

REV. 1

09-01-94

47/134

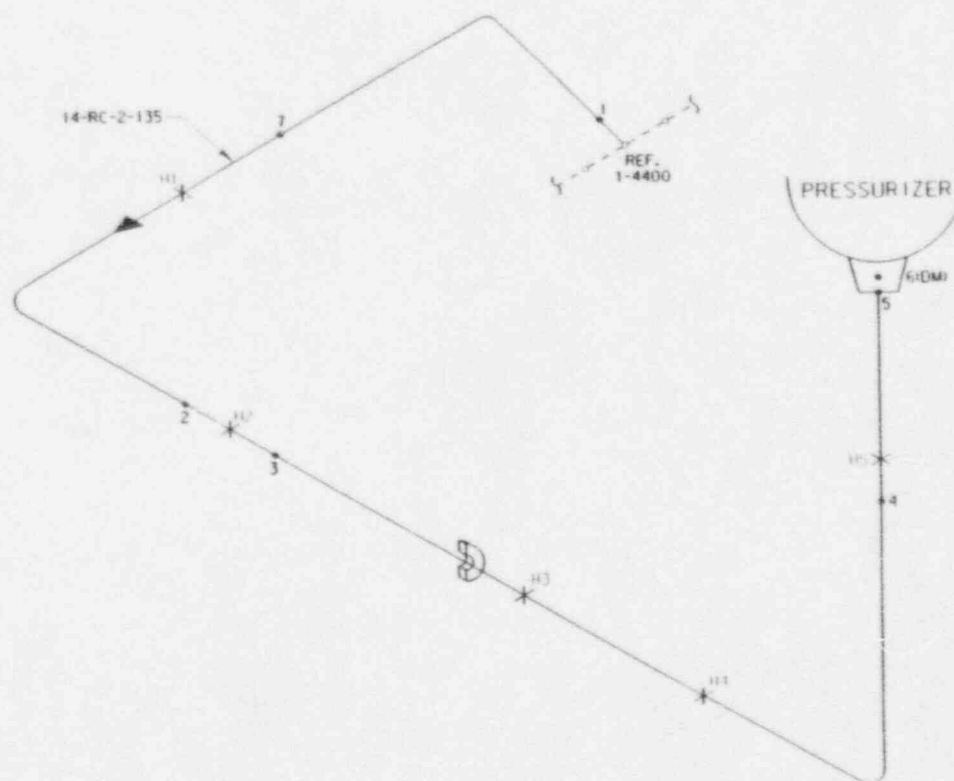


H1 : H-CS-2-RB-031-704-1
H2 : H-CS-2-RB-031-705-1
H3 : H-CS-2-RB-031-706-1

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: CS SEAL INJECTION	TU ELECTRIC		
	T/SCH: (2") 344"/160, (1.5") 281"/160			
	BRP: CS-2-RB-031	CPSES UNIT 2		
	FLOW: M2-0253	INSERVICE INSPECTION LOCATION ISOMETRIC		
APPROVAL: <i>RB/oy BS/oy 9-1-94</i>		TCX-1-4409	REV. 1	09-01-94

48/134

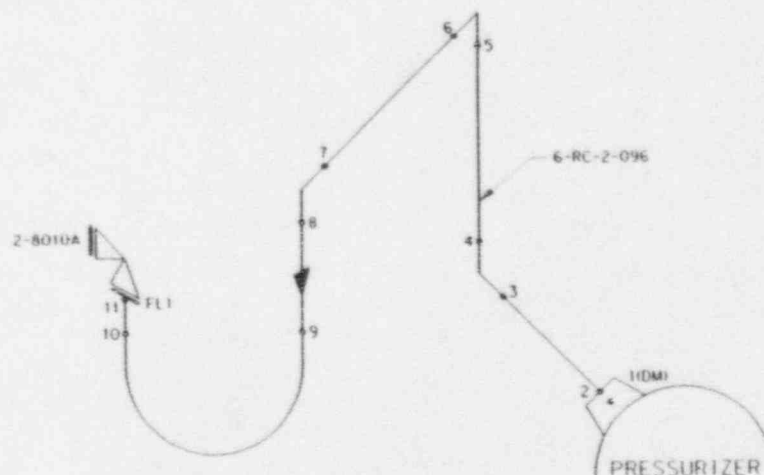


H1 : RC-2-135-401-C415
H2 : RC-2-135-401-C415
H3 : RC-2-135-408-C414
H4 : RC-2-135-407-C415
H5 : RC-2-135-409-C51R

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: RC PRESSURIZER SURGE	TU ELECTRIC		
	T/SCH: (14")1.406"/160			
	BRP: RC-2-RB-031, RC-2-RB-033	CPSES UNIT 2		
	FLOW: M2-0251	INSERVICE INSPECTION LOCATION ISOMETRIC		
APPROVAL: <i>RBMoy RBop 9-1-94</i>		TCX-1-4500	REV. 2	09-01-94

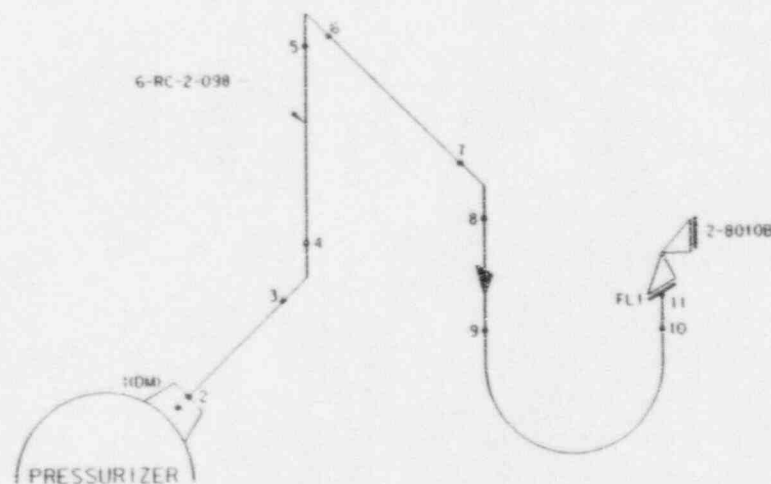
49/134



ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: RC PRESSURIZER SAFETY	TU ELECTRIC		
	T/SCH: 16" x 1.719" / 160			
	BRP: RC-2-RB-072	CPSES UNIT 2		
	FLOW: M2-0251	INSERVICE INSPECTION LOCATION ISOMETRIC		
APPROVAL: <i>RB Mays RB Mays 9-1-84</i>		TCX-1-4501	REV. 1	09-01-34

50/134



ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: RC PRESSURIZER SAFETY

T/SCH: 16"X.719"/160

BRP: RC-2-RB-072

FLOW: M2-0251

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB May: B May 9.1.94*

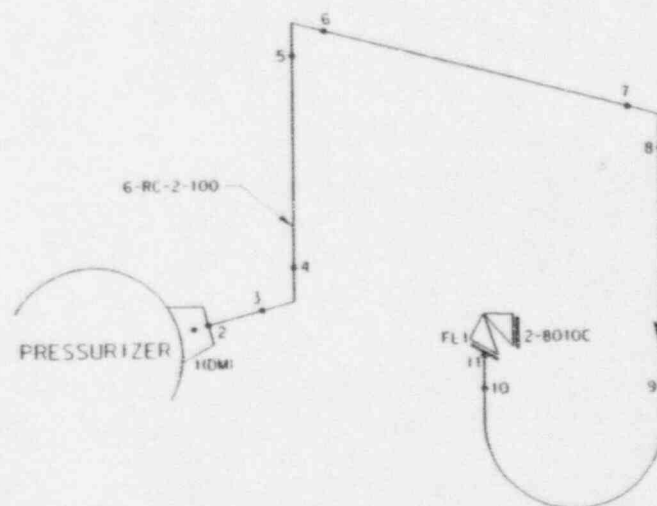
TCX-1-4502

REV. 1

09-01-94

TCX145021.151

51/134



ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: RC PRESSURIZER SAFETY

T/SCH: 16" x 1.719" / 160

BRP: RC-2-RB-072

FLOW: M2-0251

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RBMay 16 May 92-1-74*

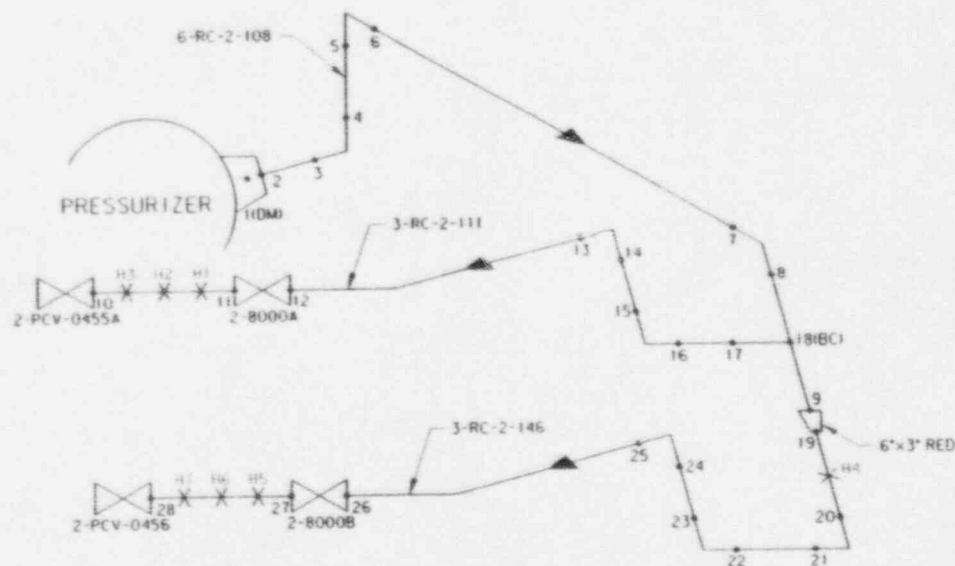
TCX-1-4503

REV. 1

09-01-94

TCX145031.1S1

52/134



- H1 : RC-2-111-402-CB1X
- H2 : RC-2-111-403-CB1X
- H3 : RL-2-111-404-B15
- H4 : RC-2-146-406-CB1X
- H5 : RC-2-146-402-CB1X
- H6 : RC-2-146-403-CB1X
- H7 : RC-2-146-401-CB15

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: RC PRESSURIZER RELIEF

T/SCH: 16\"/>

BRP: RC-2-RB-071

FLOW: M2-0250, M2-0251

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

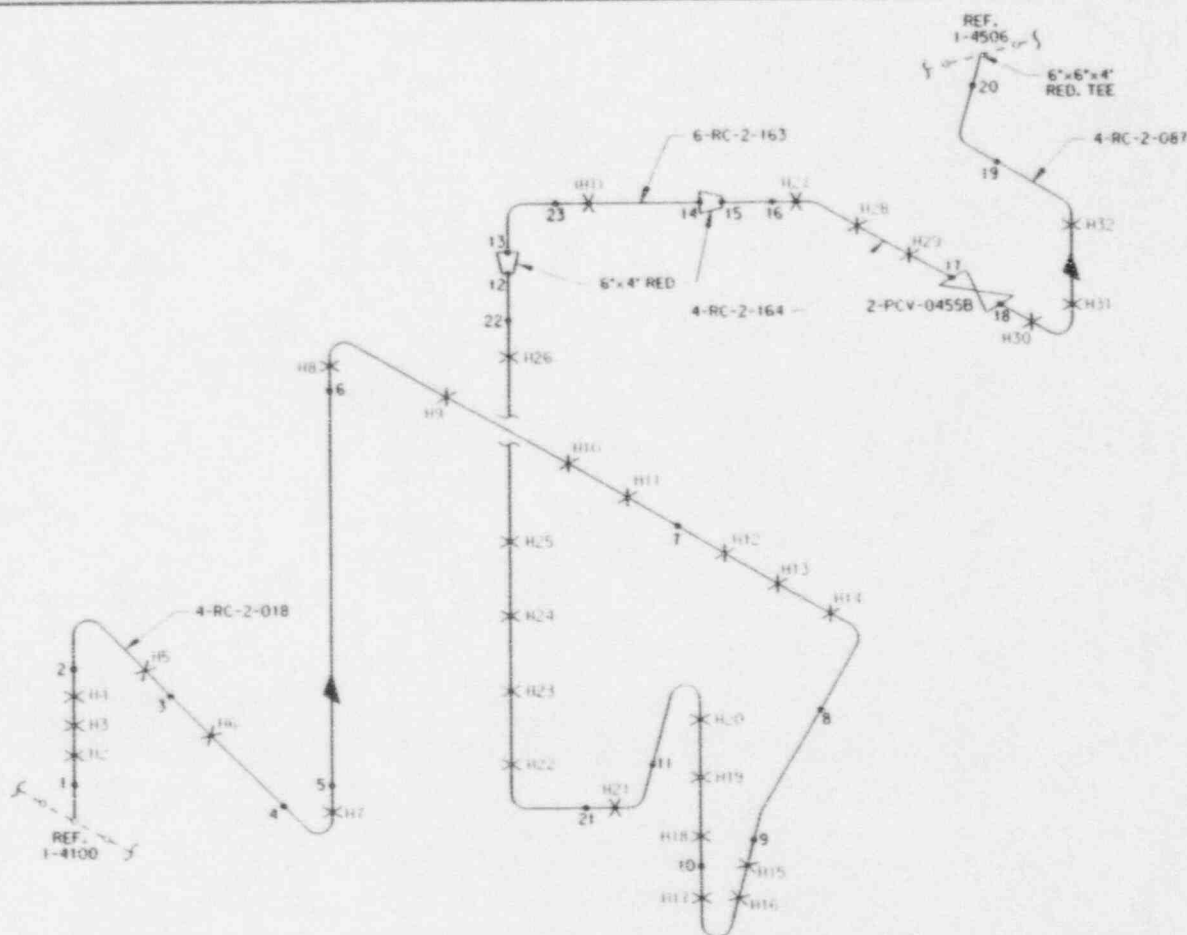
APPROVAL: *RBM/As ADM/af 9-1-94*

TCX-1-4504

REV. 1

09-01-94

53/134



- H1: RC-2-163-401-C81R
- H2: RC-2-018-421-C51R
- H3: RC-2-018-442-C51R
- H4: RC-2-018-441-C51R
- H5: RC-2-018-440-C51R
- H6: RC-2-018-438-C51R
- H7: RC-2-018-437-C51R
- H8: RC-2-018-436-C61R
- H9: RC-2-018-434-C61R
- H10: RC-2-018-435-C61R
- H11: RC-2-018-433-C61R
- H12: RC-2-018-432-C61R
- H13: RC-2-018-406-C61R
- H14: RC-2-018-431-C61R
- H15: RC-2-018-430-C61R
- H16: RC-2-018-429-C61R
- H17: RC-2-018-428-C61R
- H18: RC-2-018-426-C61R
- H19: RC-2-018-425-C61R
- H20: RC-2-018-424-C61R
- H21: RC-2-018-402-C61R
- H22: RC-2-018-421-C71R
- H23: RC-2-018-420-C71R
- H24: RC-2-018-419-C71R
- H25: RC-2-018-418-C71R
- H26: RC-2-018-427-C71R
- H27: RC-2-164-403-C81R
- H28: RC-2-164-402-C81R
- H29: RC-2-164-401-C81R
- H30: RC-2-087-403-C81R
- H31: RC-2-087-401-C81R
- H32: RC-2-087-408-C81R

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: RC PRESSURIZER SPRAY

T/SCH: 16", 719"/160, (4"), 531"/160

BRP: RC-2-RB-020, RC-2-RB-023, RC-2-RB-063

FLOW: M2-0250, M2-0251

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB/Mays RB/Mays 9-1-94*

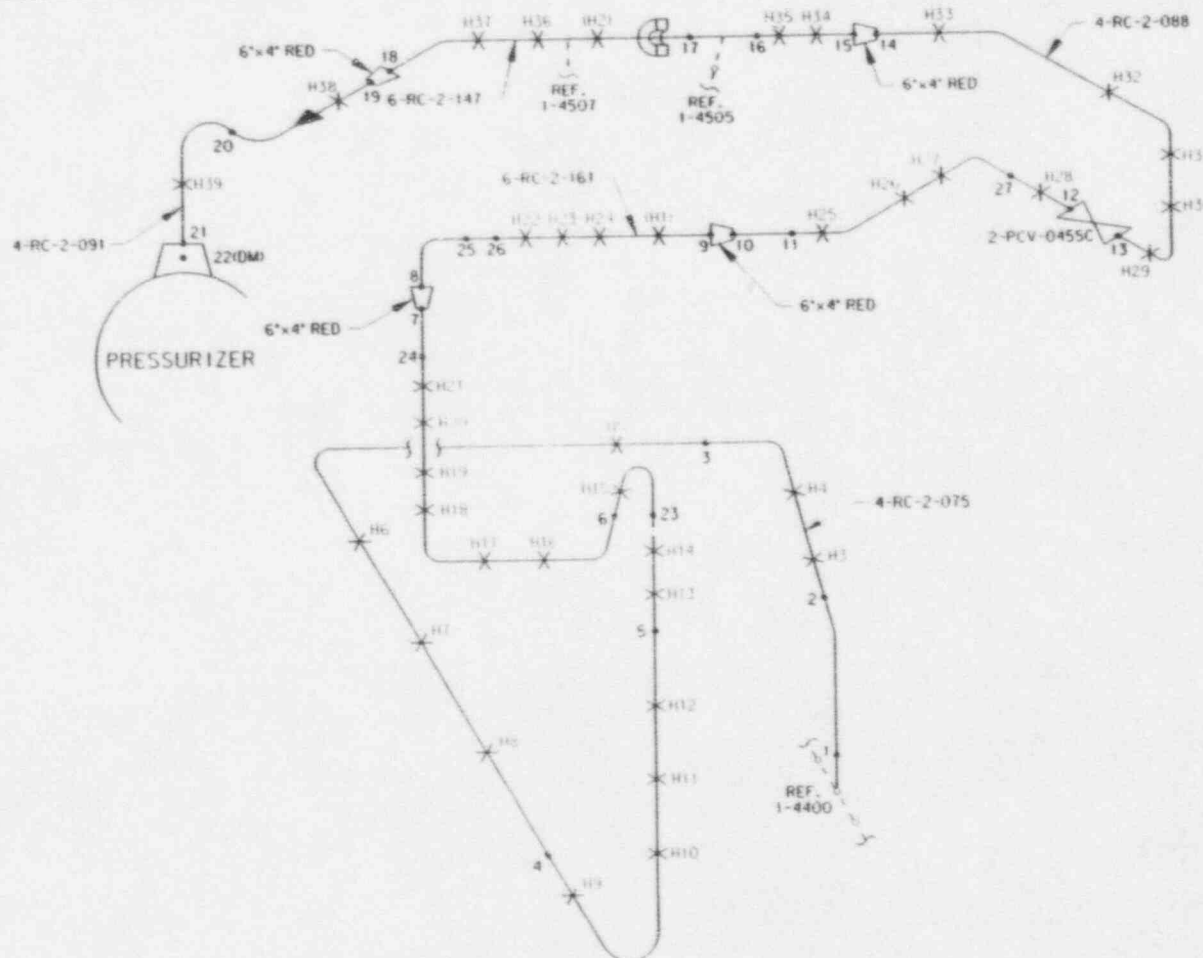
TCX-1-4505

REV. 4

09-01-94

TCX145054,1S1

54/134



- H1: RC-2-161-402-C81A
- H2: RC-2-147-406-C81B
- H3: RC-2-075-443-C51R
- H4: RC-2-075-444-C51K
- H5: RC-2-075-433-C51R
- H6: RC-2-075-435-C51R
- H7: RC-2-075-434-C51K
- H8: RC-2-075-441-C51K
- H9: RC-2-075-408-C51S
- H10: RC-2-075-431-C51R
- H11: RC-2-075-429-C51R
- H12: RC-2-075-430-C51R
- H13: RC-2-075-427-C61R
- H14: RC-2-075-426-C61R
- H15: RC-2-075-425-C61R
- H16: RC-2-075-424-C61R
- H17: RC-2-075-404-C61R
- H18: RC-2-075-422-C61R
- H19: RC-2-075-421-C61R
- H20: RC-2-075-420-C71R
- H21: RC-2-075-417-C71K
- H22: RC-2-075-404-C81R
- H23: RC-2-075-405-C81R
- H24: RC-2-075-403-C81R
- H25: RC-2-075-402-C81R
- H26: RC-2-075-401-C81R
- H27: RC-2-075-400-C81R
- H28: RC-2-075-400-C81R
- H29: RC-2-075-400-C81R
- H30: RC-2-075-400-C81R
- H31: RC-2-075-400-C81R
- H32: RC-2-075-400-C81R
- H33: RC-2-075-400-C81R
- H34: RC-2-075-400-C81R
- H35: RC-2-075-400-C81R
- H36: RC-2-075-400-C81R
- H37: RC-2-075-400-C81R
- H38: RC-2-075-400-C81R
- H39: RC-2-075-400-C81R

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: RC PRESSURIZER SPRAY

T/SCH: (6"), 719"/160, (4"), 531/160

BRP: RC-2-RB-025, RC-2-RB-030, RC-2-RB-073

FLOW: M2-0250, M2-0251

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RBMoy's RBMoy 8-1-94*

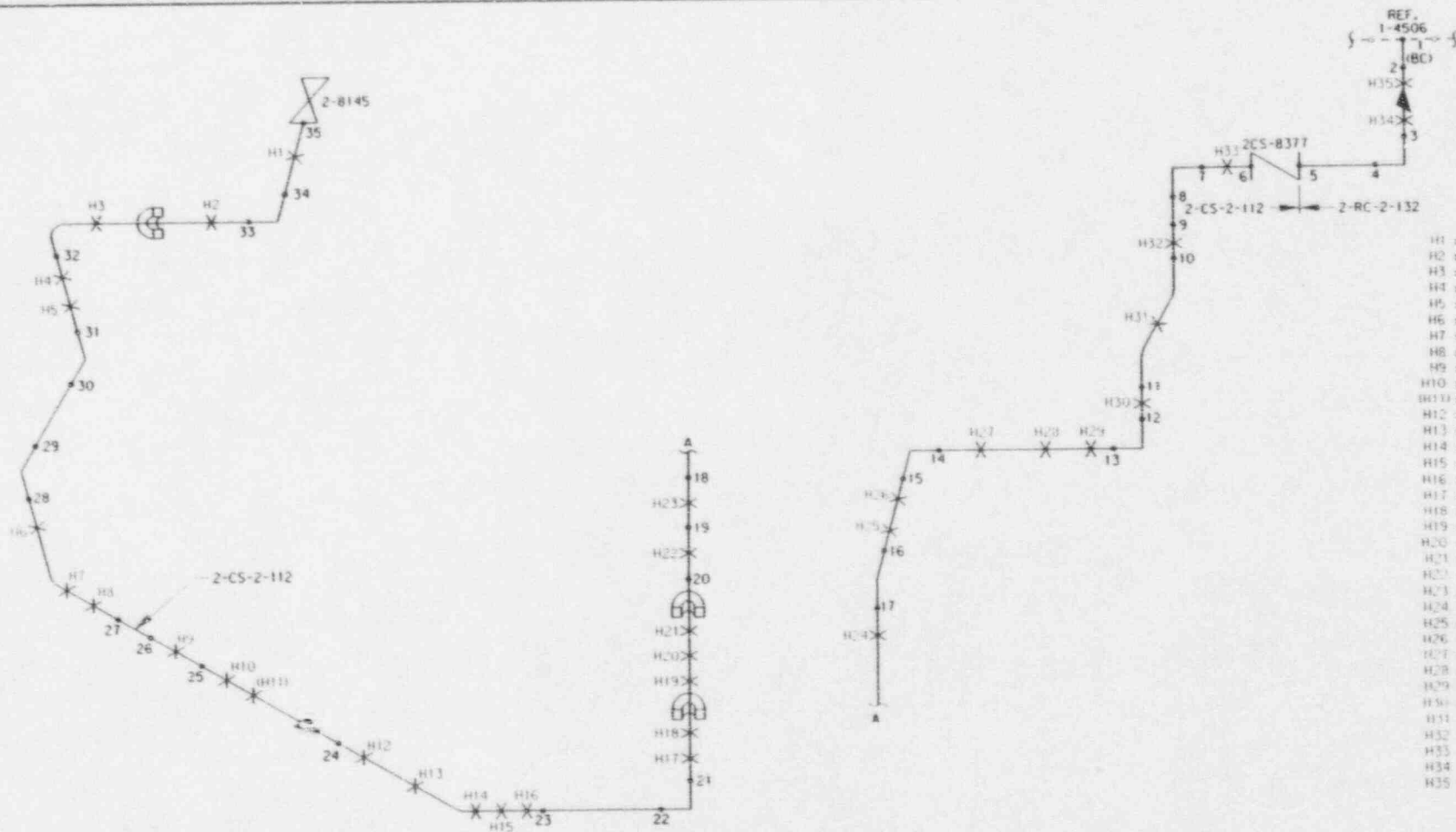
TCX-1-4506

REV. C

09-01-94

TCX-145064-151

55/134



- H1 : H-CS-2-RB-021-T15-1
- H2 : H-CS-2-RB-021-T14-1
- H3 : H-CS-2-RB-021-T13-1
- H4 : H-CS-2-RB-021-T12-1
- H5 : H-CS-2-RB-021-T11-1
- H6 : H-CS-2-RB-021-T10-1
- H7 : H-CS-2-RB-021-T09-1
- H8 : H-CS-2-RB-021-T18-1
- H9 : H-CS-2-RB-021-T08-1
- H10 : H-CS-2-RB-021-T07-1
- H11 : H-CS-2-RB-021-T06-1
- H12 : H-CS-2-RB-021-T05-1
- H13 : H-CS-2-RB-021-T04-1
- H14 : H-CS-2-RB-021-T03-1
- H15 : H-CS-2-RB-021-T02-1
- H16 : H-CS-2-RB-021-T01-1
- H17 : H-CS-2-RB-023-T01-1
- H18 : H-CS-2-RB-023-T02-1
- H19 : H-CS-2-RB-023-T03-1
- H20 : H-CS-2-RB-023-T04-1
- H21 : H-CS-2-RB-023-T05-1
- H22 : H-CS-2-RB-023-T06-1
- H23 : H-CS-2-RB-023-T07-1
- H24 : H-CS-2-RB-023-T08-1
- H25 : H-CS-2-RB-072-T01-1
- H26 : H-CS-2-RB-072-T02-1
- H27 : H-CS-2-RB-072-T03-1
- H28 : H-CS-2-RB-072-T04-1
- H29 : H-CS-2-RB-072-T05-1
- H30 : H-CS-2-RB-074-T04-1
- H31 : H-CS-2-RB-074-T03-1
- H32 : H-CS-2-RB-074-T02-1
- H33 : H-CS-2-RB-074-T01-1
- H34 : H-RC-2-RB-073-T02-1
- H35 : H-RC-2-RB-073-T01-1

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: CS/REACTOR COOLANT

T/SCH: (2"), 344"/160

BRP: CS-2-RB-021, CS-2-RB-023, CS-2-RB-072,
CS-2-RB-074, RC-2-RB-073

FLOW: M2-0251, M2-0253

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RBAlex BMay 9-1-94*

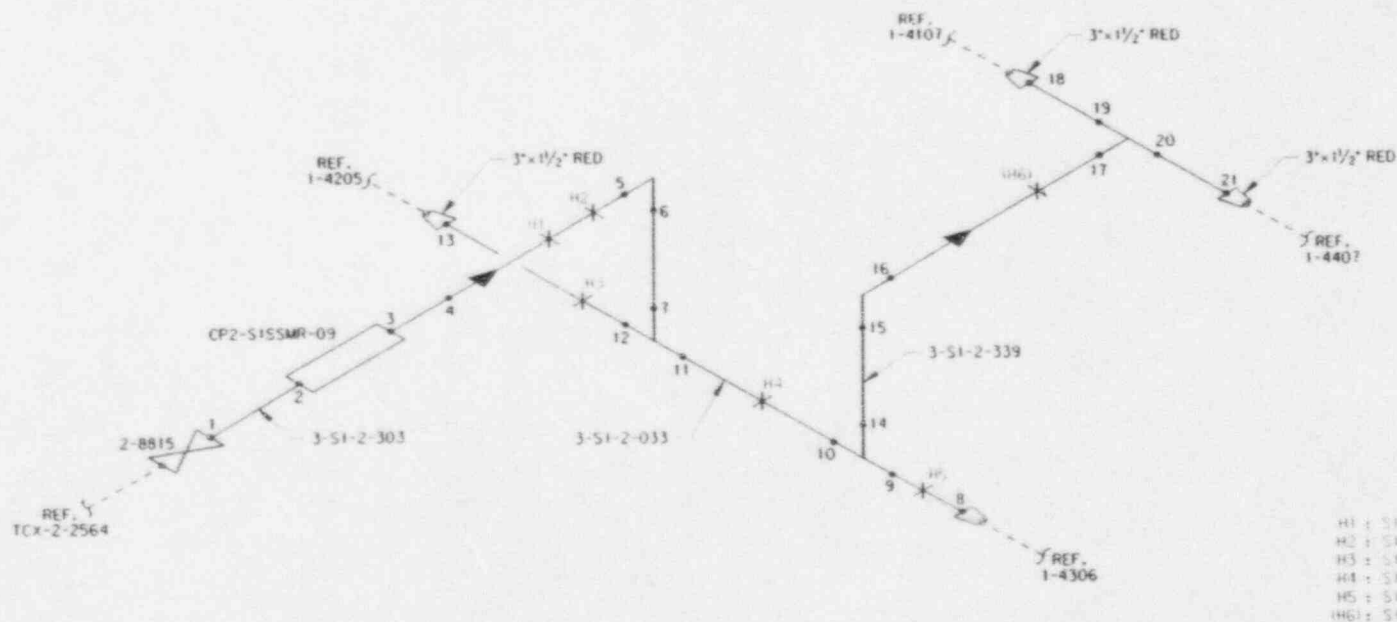
TCX-1-4507

REV. 2

09-01-94

TCX145072.1S1

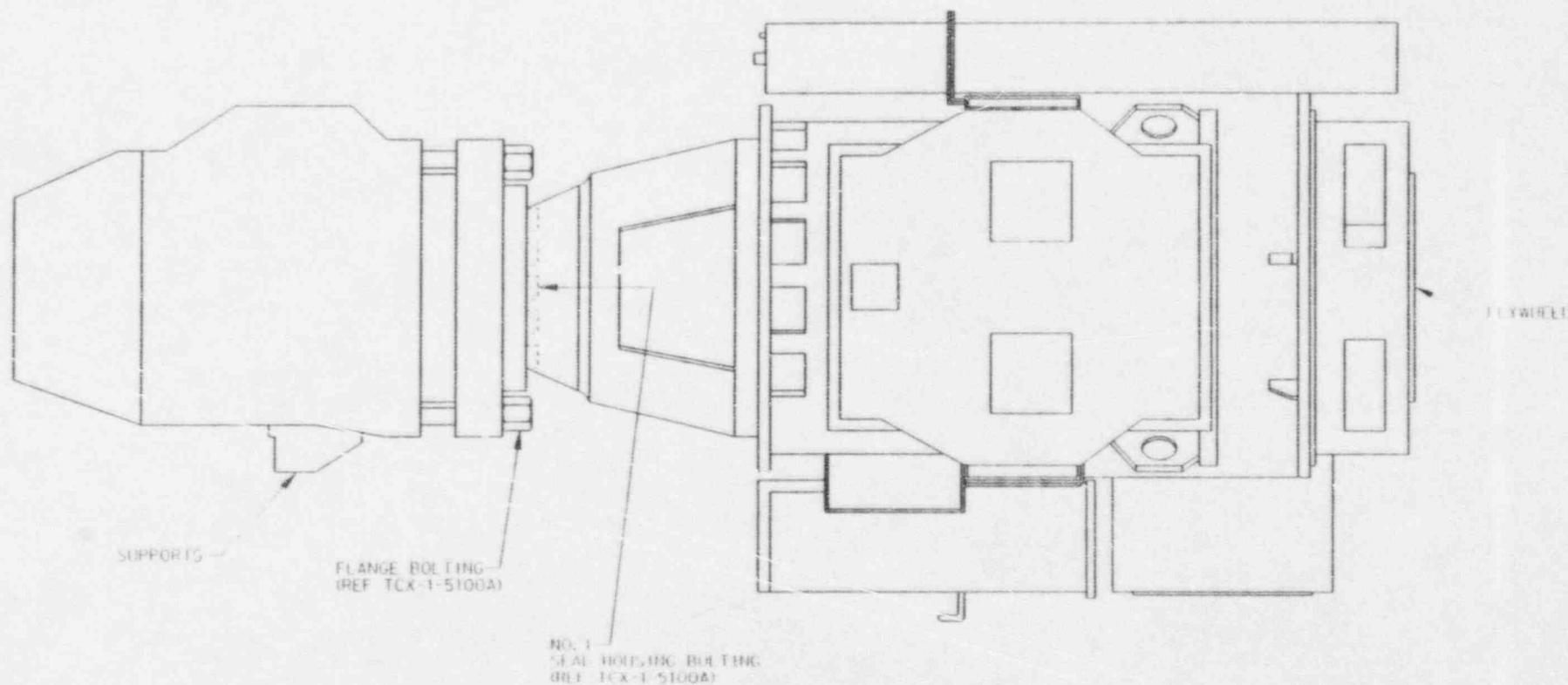
56/134



ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: SAFETY INJECTION	TU ELECTRIC CPSES UNIT 2		
	T/SCH: 17.438"/160			
	BRP: SI-2-RB-008, SI-2-RB-033, SI-2-RB-048	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FLOW: M2-0261			
APPROVAL: <i>RBMops RBMops 9-1-94</i>		TCX-1-4600	REV. 2	09-01-94

57/134



ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: REACTOR COOLANT PUMPS 1, 2, 3 AND 4

TU ELECTRIC
CPSES UNIT 2
INSERVICE INSPECTION
LOCATION ISOMETRIC

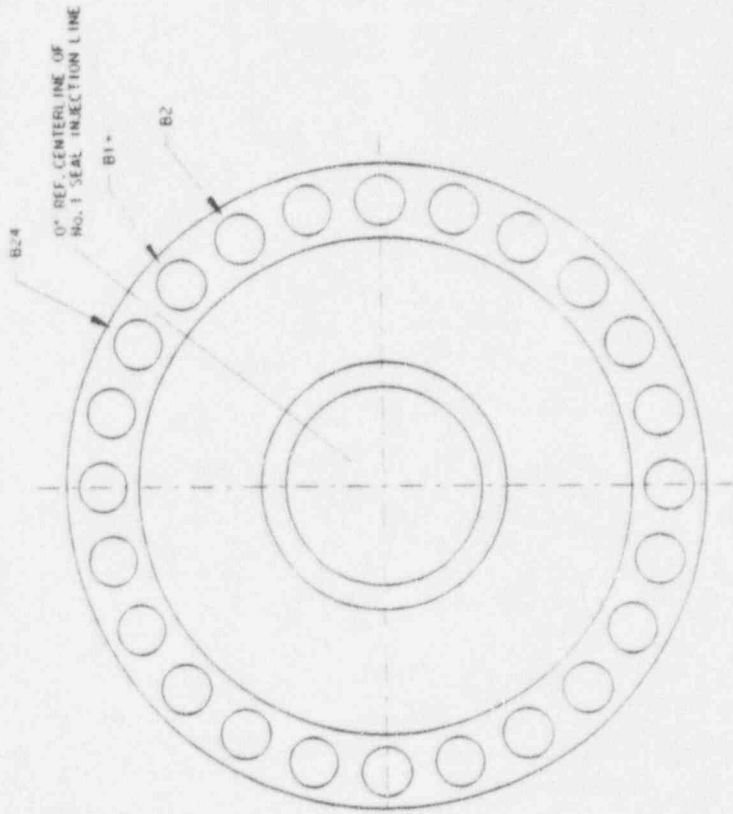
APPROVAL: *RB May* 11-3-94

TCX-1-5100 REV. 1 11-03-94

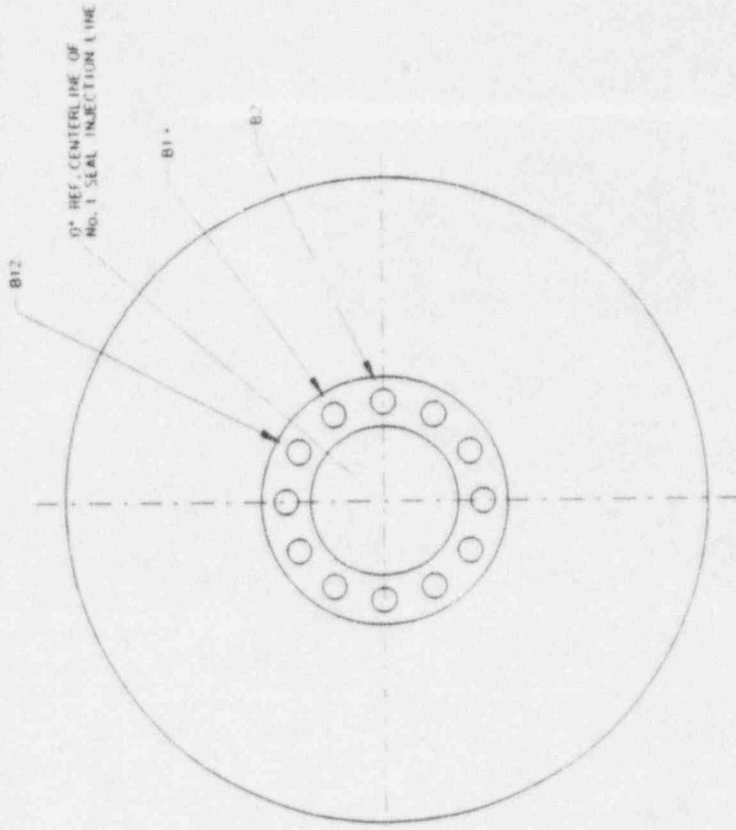
TCX151001.151

58/134

MAIN FLANGE BOLTING



NO. 1 SEAL HOUSING BOLTING



PUMP DESIGNATION PRECEDES BOLT IDENTIFICATION

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: R.C. PUMP BOLTING

MAIN FLANGE - 24 BOLTS/4.5" DIA./30.5" L
SEAL HOUSING - 12 BOLTS/2" DIA./8" LENG

TU ELECTRIC

CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB May 18/94* 5.1.94

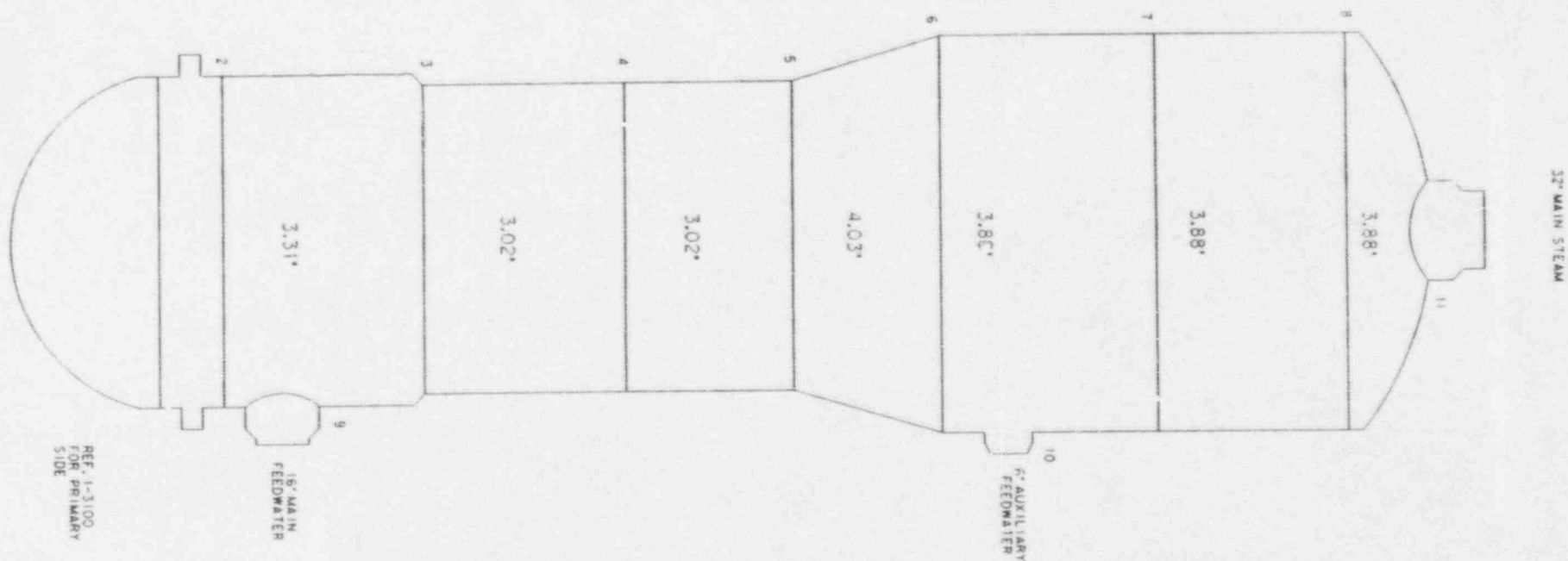
REV. 1

TCX-1-5100A

09-01-94

TC-5100A1.FSI

59/134



ILLUSTRATIVE USE ONLY

NOTES: GENERATOR NUMBER PRECEDES WELD NUMBER.
INNER RADIUS EXAMINATION ITEMS ARE IDENTIFIED BY
THE CORRESPONDING NOZZLE TO SHELL WELD
NUMBER WITH AN "IR" SUFFIX.

DESCRIPTION: STEAM GENERATORS 1, 2, 3 & 4

SHELL & HEAD - SA-533
NOZZLES - SA-508

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

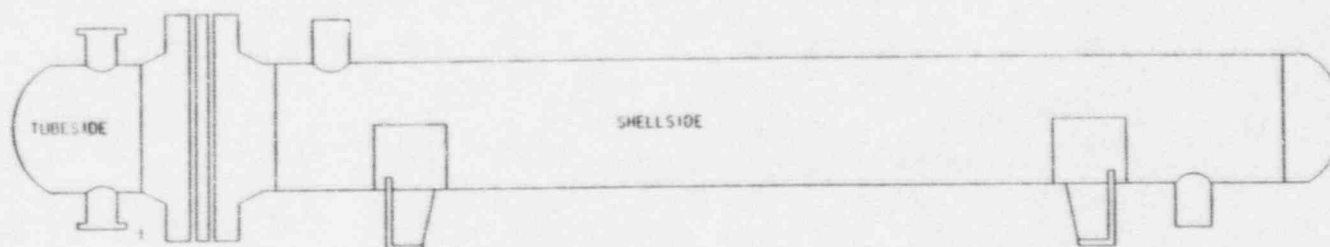
APPROVAL: *RB May BS Agg 7-1-94*

TCX-2-1100

REV. 1

09-01-94

60/134



ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: CS EXCESS LETDOWN HX

(TUBESIDE) .750"/SA-240
(SHELLSIDE) .322"/SA-106TU ELECTRIC
CPSES UNIT 2INSERVICE INSPECTION
LOCATION ISOMETRICAPPROVAL: *RB May* *RB May* 9.1.94

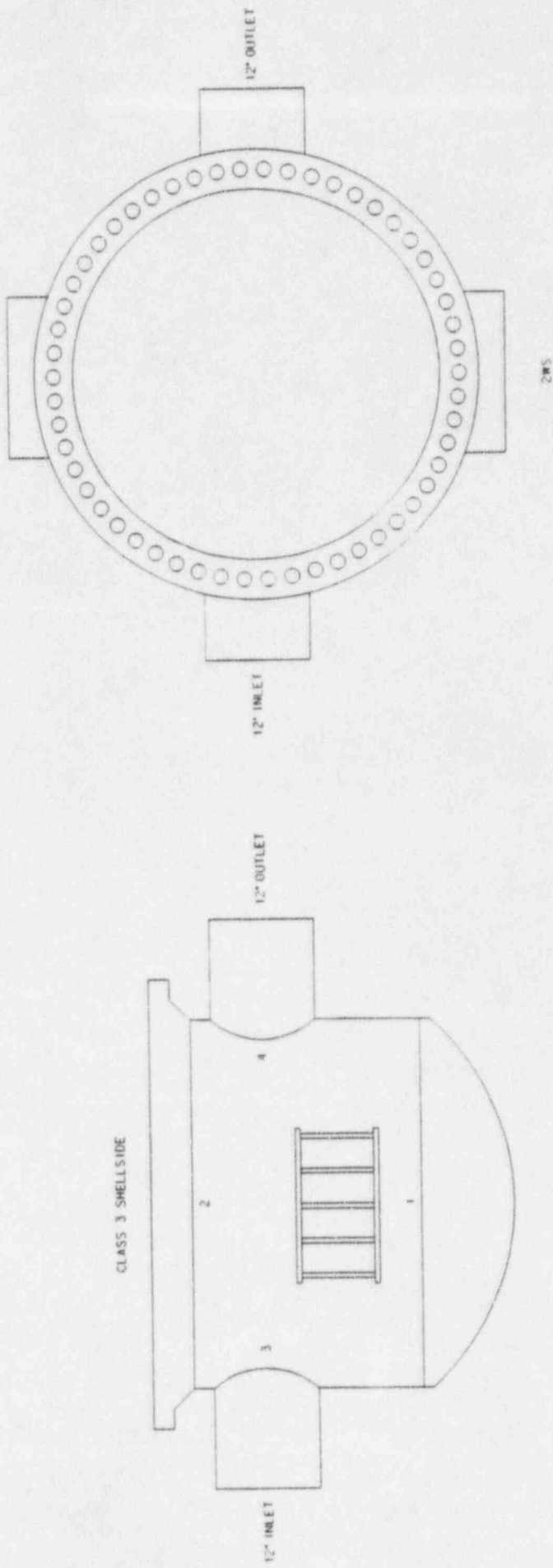
TCX-2-1110

REV. 1

09-01-94

TCX-11101.151

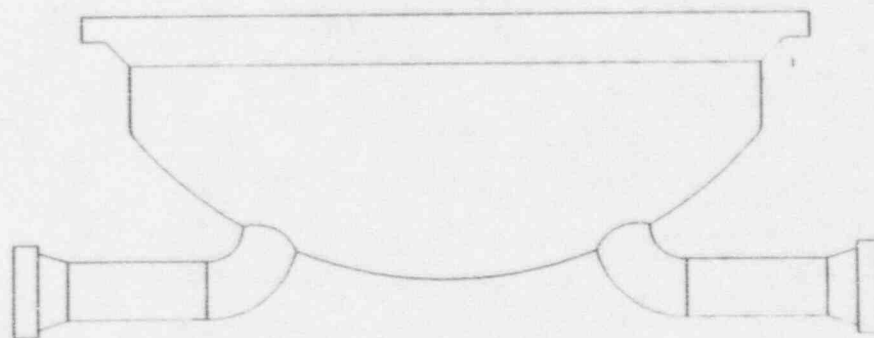
61/134



TU ELECTRIC		TCX-2-1120		REV. 1	09-01-94
CPSSES UNIT 2					
INSERVICE INSPECTION LOCATION ISOMETRIC					
DESCRIPTION: RHR HXS 1 & 2		FLOW:			
VESSEL IS 1.00" (SA-240). NOZZLES ARE 12" SCH 80S WITH INTERNAL REINFORCING PAD.					
NOTES: HEAT EXCHANGER NO. PRECEDES EXAM AREA IDENTIFICATION.		APPROVAL: <i>RBMey</i> <i>BS May</i> 9-1-94			
		TCX-11201, 101			

62/134

CLASS 3 SHELLSIDE



ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: CS HORIZONTAL LETDOWN HX
HEAD IS .625" (SA-240)

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB May* *FB Mays* 9/1/94

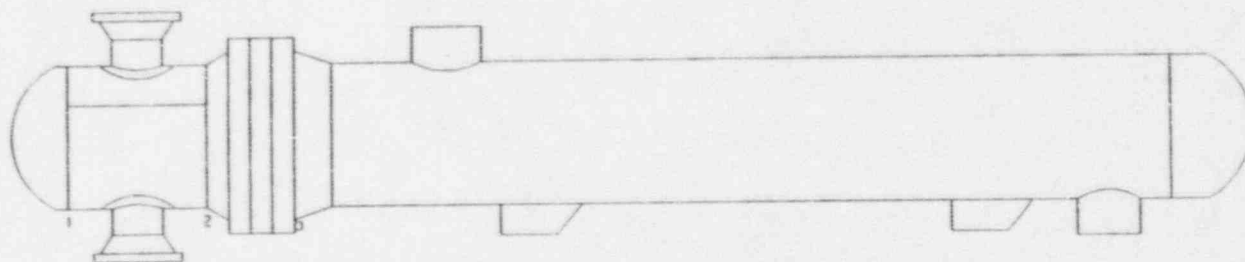
TCX-2-1130

REV. 1

10-01-94

TCX-21130-1.151

63/134



ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: CS LETDOWN REHEAT HX
HEAD IS .322" (SA-240)

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL:

RB May *RB May* 9-1-94

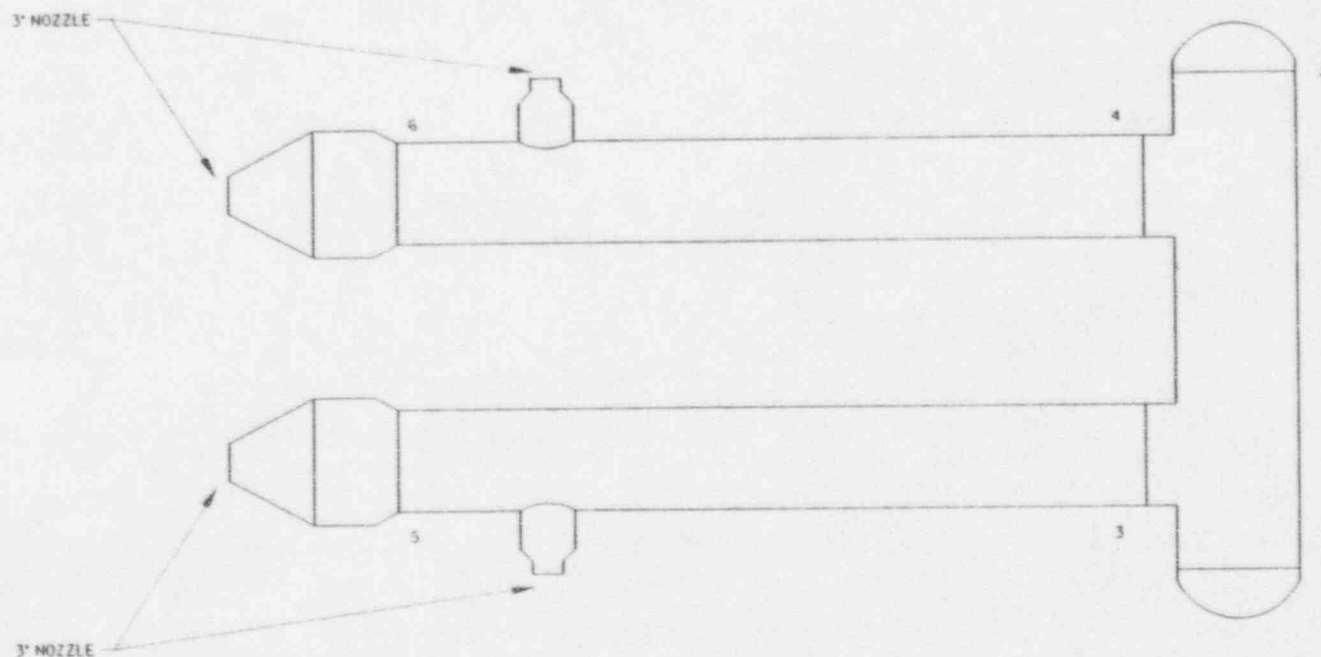
TCX-2-1140

REV. 1

09-01-94

TCX-2-11401.151

64/134



ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: REGENERATIVE HX

WELDS 1 AND 2 - 1.00\"T; WELDS 3, 4, 5, 6 - .812\"T
PIPE & NOZZLES (SA-312/304)
TUBESHEET & TEE (SA-182/304)
HEADS (SA240/304)

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB May RB May* 9-1-94

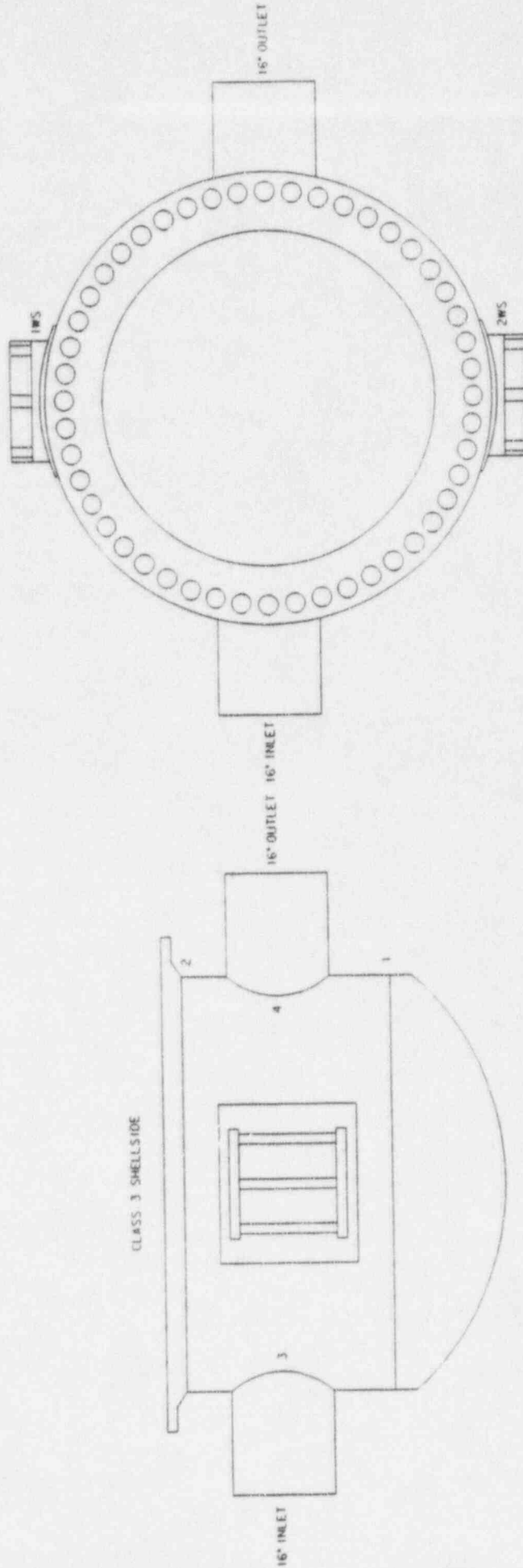
TCX-2-1150

REV. 1

09-01-94

TCX211501.1S1

65/134



ILLUSTRATIVE USE ONLY

DESCRIPTION: CONTAINMENT SPRAY HX
MATERIAL IS SA-240, NOZZLE SA-358,
HEAD .500", SHELL .625"

NOTES: HX DESIGNATION PRECEDES WELD IDENTIFICATION.

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB Mays* *BS Mays* 9/1/94

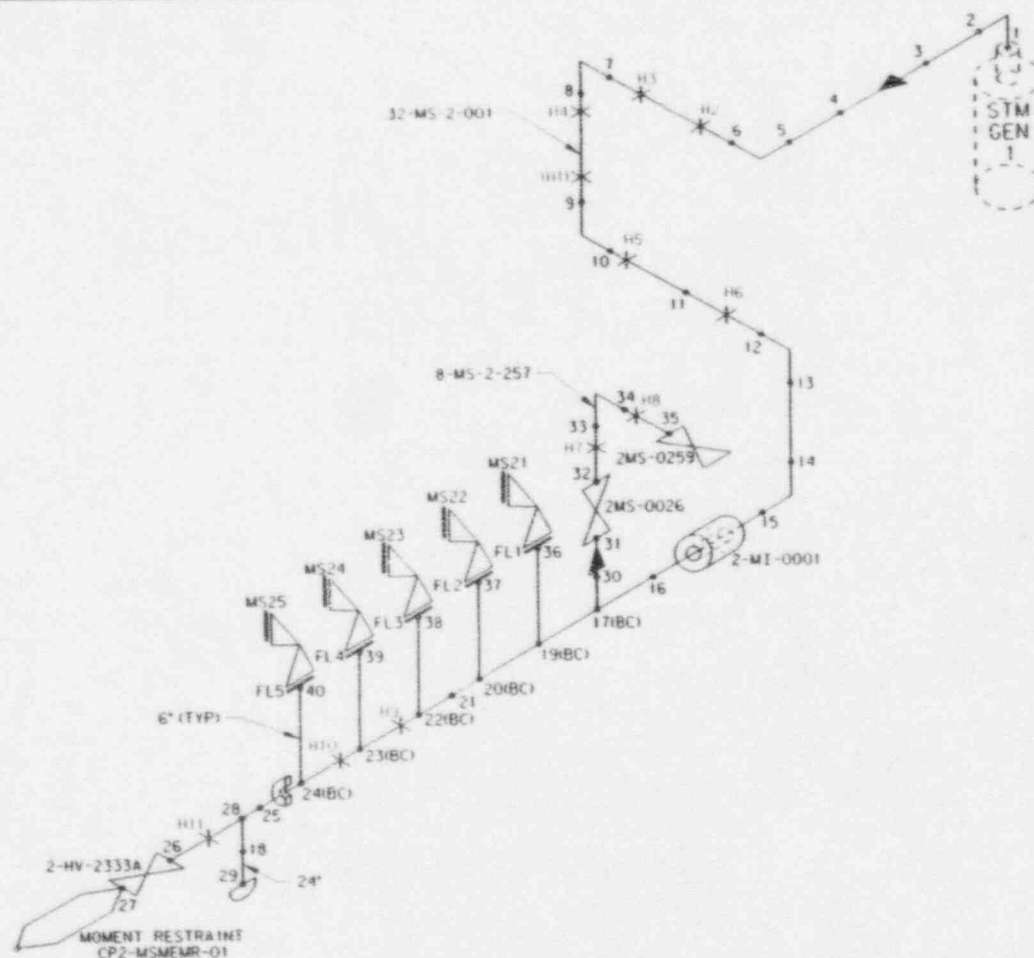
TCX-2-1180

REV. 2

02-01-94

TCX211802.154

06/134



- H11 : MS-2-001-405-C72K
- H12 : MS-2-001-407-C72K
- H13 : MS-2-001-401-C72S
- H14 : MS-2-001-406-C72K
- H15 : MS-2-001-404-C72K
- H16 : MS-2-001-402-C72S
- H17 : MS-2-257-403-S72K
- H18 : MS-2-257-404-S72K
- H19 : MS-2-001-412-S72R
- H10 : MS-2-001-411-S72R
- H11 : MS-2-001-408-S72R

ILLUSTRATIVE USE ONLY

NOTES: LONGITUDINAL WELDS:
1L, 2L, 3L, 4L, 5L, 6L, 7L, 8L, 9L, 10L,
11L, 12L, 13L, 14L, 15L, 16L, 21L, 25L, 26L

DESCRIPTION: MAINSTEAM

T/SCH: (32")1.25"/MIN. WALL, (24")1.531"/100, (24")1.219"/80,
(8")1.906"/160, (8")1.500"/80, (6")1.719"/160

BRP: MS-2-RB-025, MS-2-RB-029, MS-2-SB-021,

MS-2-SB-056

FLOW: M2-0202

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB May RB 9-1-94*

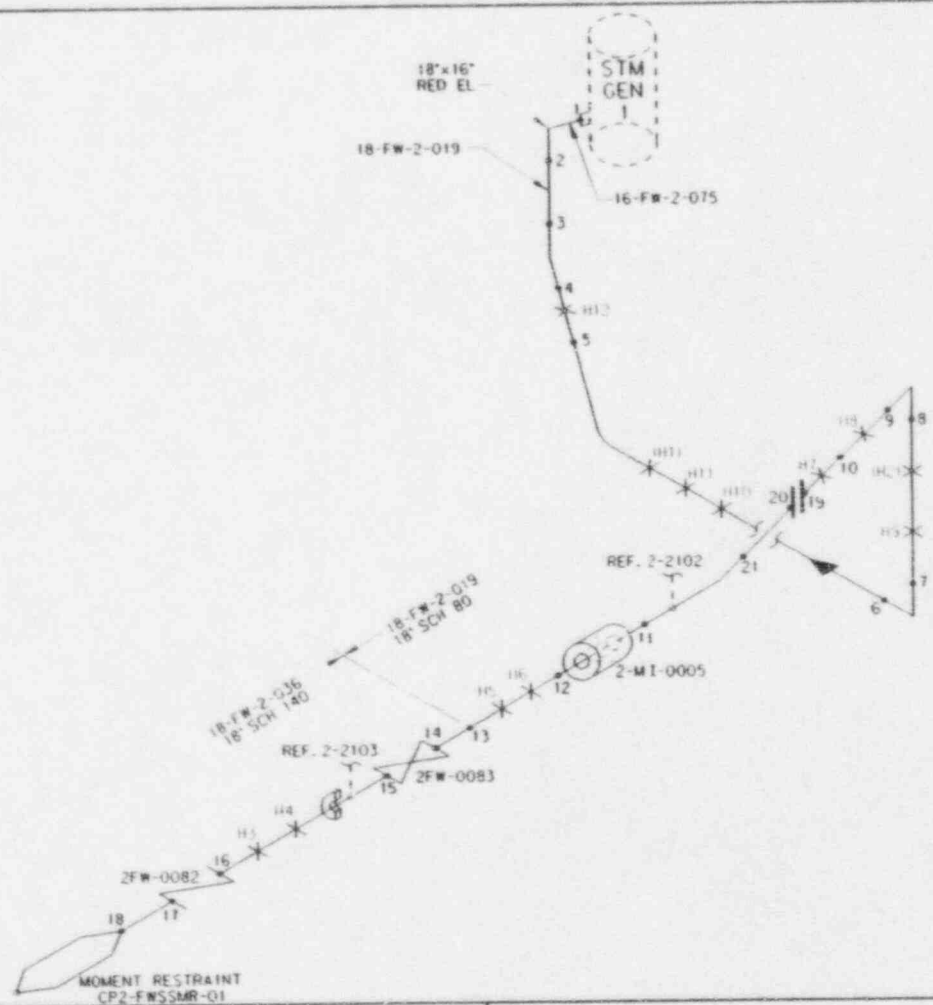
TCX-2-2100

REV. 3

09-01-94

TCX221003.1S1

67/134

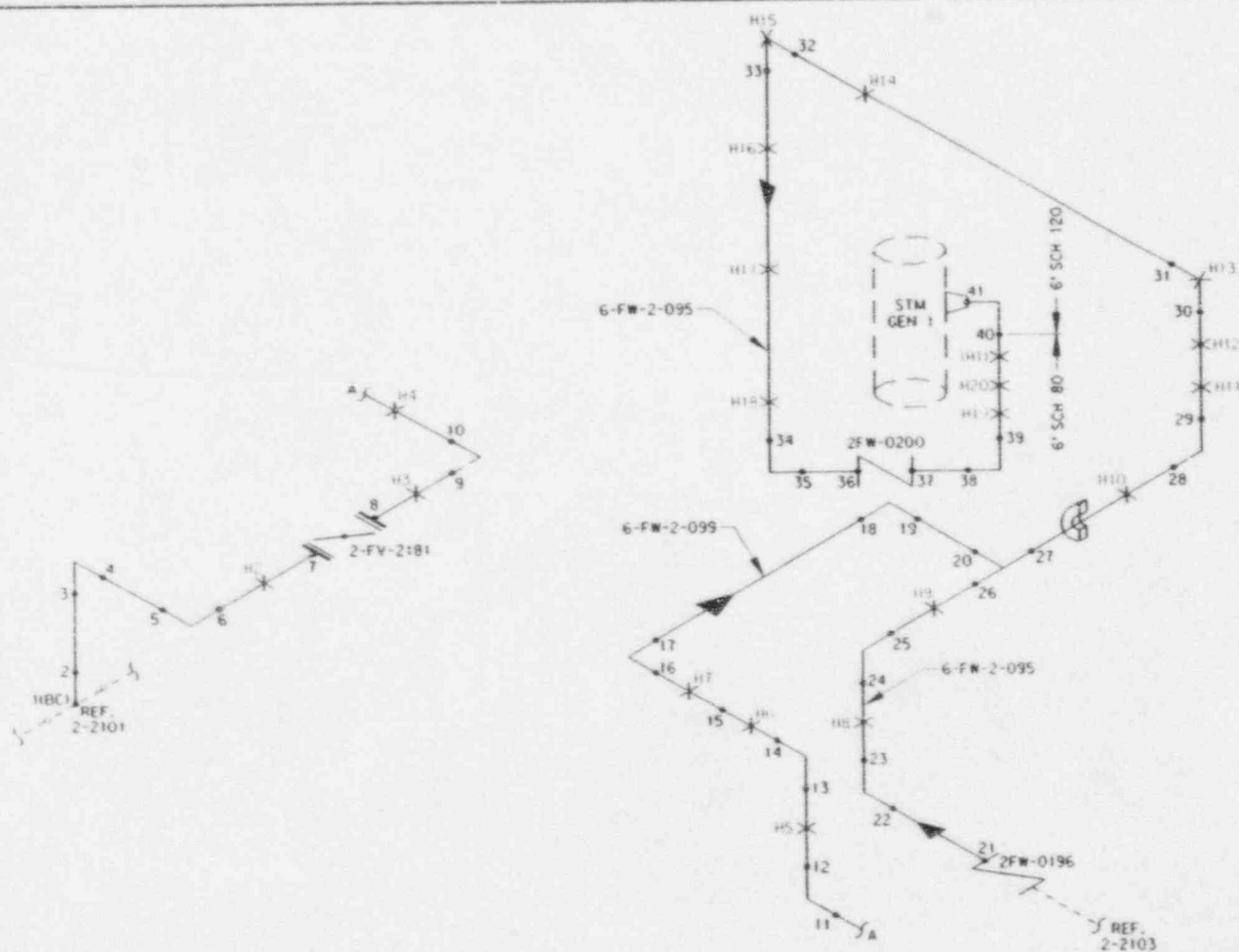


- H01 : FW-2-019-404-C42K
- H02 : FW-2-019-404-C52R
- H3 : FW-2-036-401-S62R
- H4 : FW-2-036-402-S62R
- H5 : FW-2-019-409-S62R
- H6 : FW-2-019-408-S62R
- H7 : FW-2-019-405-C52K
- H8 : FW-2-019-402-C52S
- H9 : FW-2-019-403-C52R
- H10 : FW-2-019-411-C42K
- H11 : FW-2-019-412-C42K
- H12 : FW-2-019-401-C42S

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: FEEDWATER	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (18")1,562"/140, (18")1,938"/80, (16")1,844"/80			
	BRP: FW-2-RB-007, FW-2-RB-008, FW-2-SB-001B, FW-2-SB-001A	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FLOW: M2-0203			
APPROVAL: <i>ZB May 2 1994</i>		TCX-2-210:	REV. 2	09-01-94

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H1 : FW-2-095-411-C6.25
 H2 : FW-2-095-413-C6.25
 H3 : FW-2-095-415-C6.25
 H4 : FW-2-095-417-C6.25
 H5 : FW-2-095-419-C6.25
 H6 : FW-2-095-421-C6.25
 H7 : FW-2-095-423-C6.25
 H8 : FW-2-095-425-C6.25
 H9 : FW-2-095-427-C6.25
 H10 : FW-2-095-429-C6.25
 H11 : FW-2-095-431-C6.25
 H12 : FW-2-095-433-C6.25
 H13 : FW-2-095-435-C6.25
 H14 : FW-2-095-437-C6.25
 H15 : FW-2-095-439-C6.25
 H16 : FW-2-095-441-C6.25
 H17 : FW-2-095-443-C6.25
 H18 : FW-2-095-445-C6.25
 H19 : FW-2-095-447-C6.25
 H20 : FW-2-095-449-C6.25

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: FEEDWATER

T/SCH: (6\"/>

BRP: FW-2-RB-021, FW-2-RB-023, FW-2-RB-027

FLOW: M2-0203

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *R B Mays AS May 9-1-94*

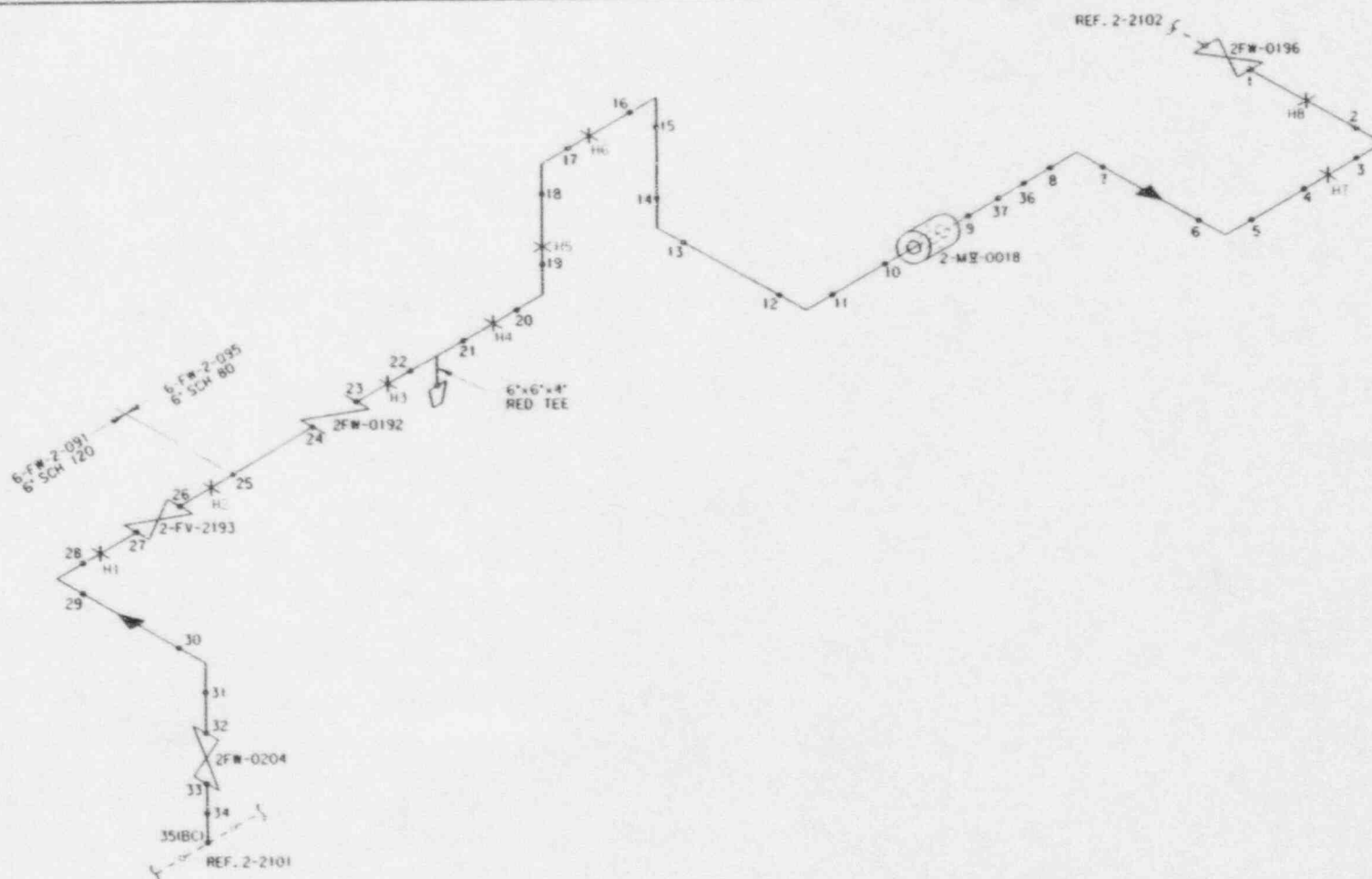
TCX-2-2102

REV. 2

09-01-94

TCX-2-2102-151

69/134



H1 : FW-2-095-401-S62R
 H2 : FW-2-095-401-S62R
 H3 : FW-2-095-401-S62R
 H4 : FW-2-095-401-S62R
 H5 : FW-2-095-402-S62R
 H6 : FW-2-095-401-S62R
 H7 : FW-2-095-401-S62R
 H8 : FW-2-095-705-S62R

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: FEEDWATER

T/SCH: (6\"/>

BRP: FW-2-RB-027, FW-2-SB-031

FLOW: M2-0203

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

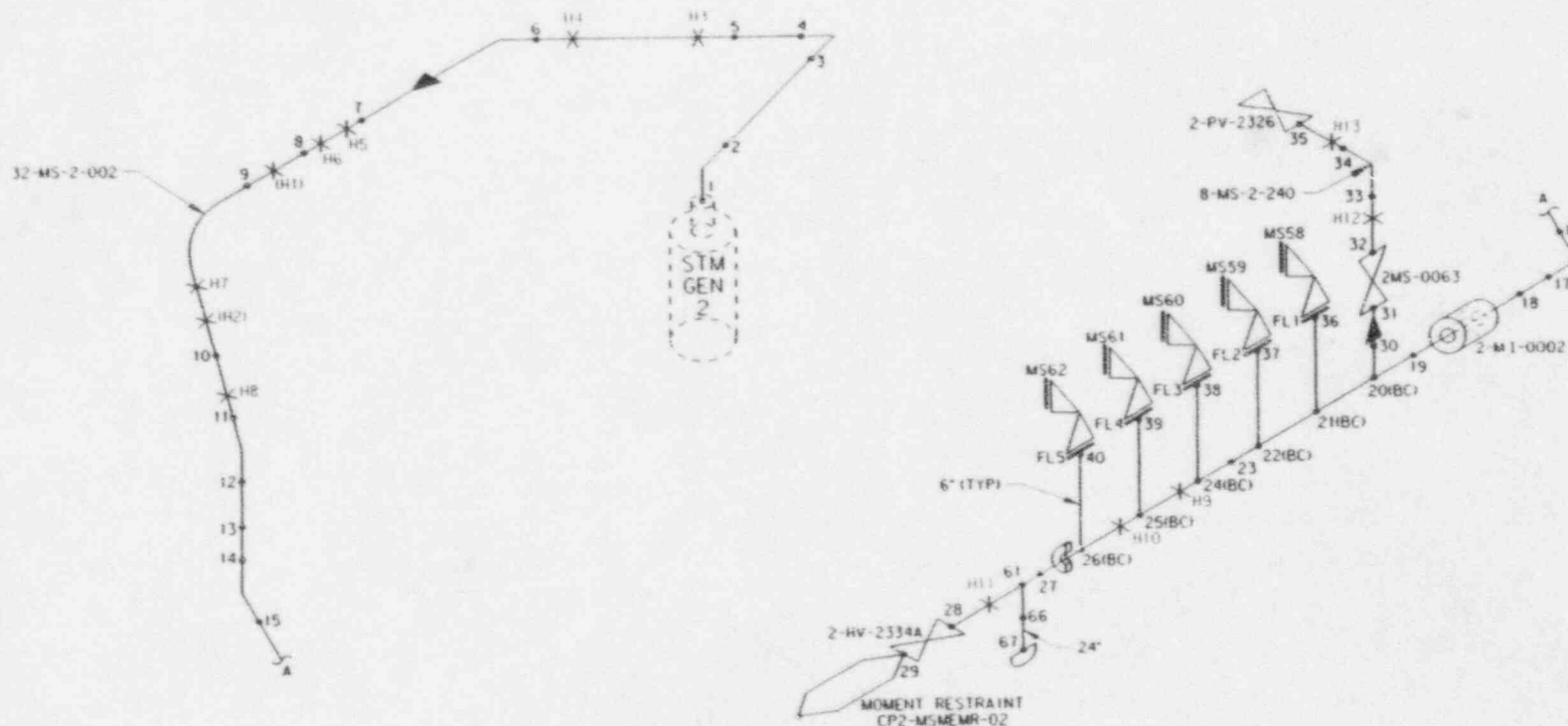
APPROVAL: *RB May 9-1-94*

TCX-2-2103

REV. 1

09-01-94

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- H11 : MS-2-002-401-C72K
- H12 : MS-2-002-404-C72K
- H13 : MS-2-002-401-C72K
- H14 : MS-2-002-405-C72K
- H15 : MS-2-002-405-C72K
- H16 : MS-2-002-402-C72K
- H17 : MS-2-002-400-C72K
- H18 : MS-2-002-407-C72K
- H19 : MS-2-002-419-S72R
- H20 : MS-2-002-418-S72R
- H21 : MS-2-002-416-S72R
- H22 : MS-2-240-401-S72K
- H23 : MS-2-240-402-S72K

ILLUSTRATIVE USE ONLY

NOTES: LONGITUDINAL WELDS:
1L, 2L, 3L, 4L, 5L, 6L, 7L, 8L, 9L, 10L,
11L, 12L, 13L, 14L, 15L, 16L, 17L, 18L

DESCRIPTION: MAINSTEAM

T/SCH: (32")1.25"/MIN. WALL, (24")1.531"/100, (24")1.219"/80,
(8")1.906"/160, (8")1.500"/80, (6")1.719"/160

BRP: MS-2-RB-018, MS-2-RB-019, MS-2-RB-027,
MS-2-SB-019, MS-2-SB-033

FLOW: M2-0202

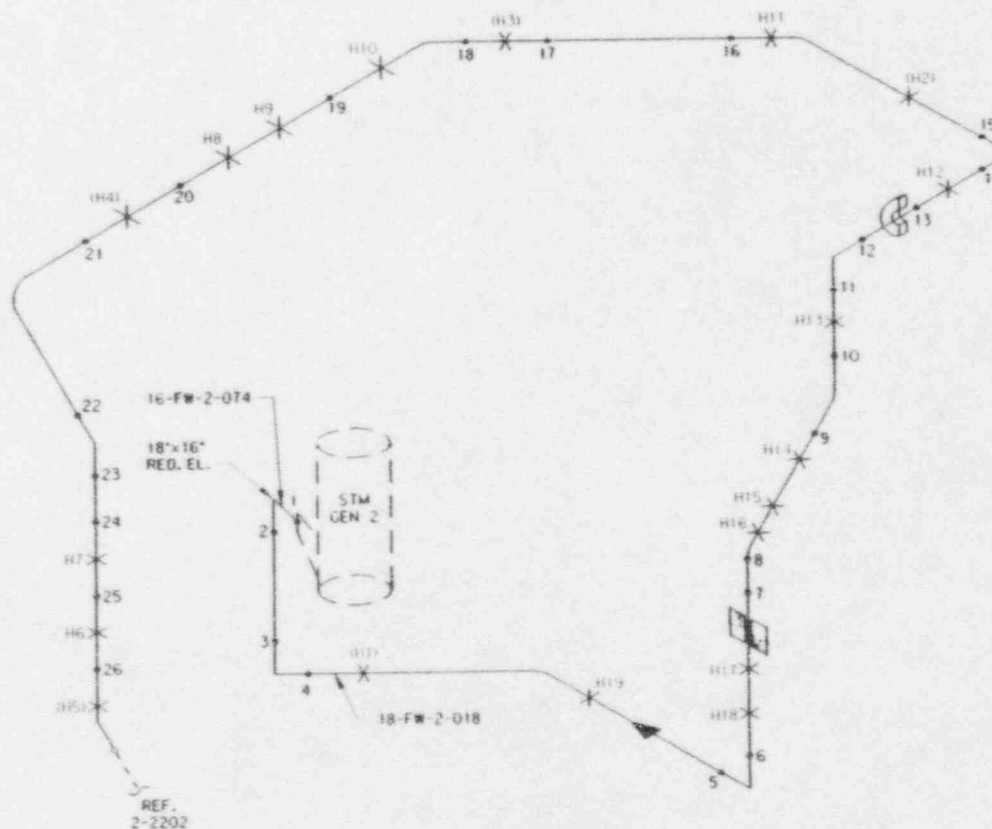
TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB/ops B. May 9-1-94*

TCX-2-2200 REV. 3 09-01-94

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- 001: FW-2-018-458-C7R
- 002: FW-2-018-448-C7R
- 003: FW-2-018-446-C7R
- 004: FW-2-018-441-C7R
- 005: FW-2-018-440-C7R
- 006: FW-2-018-439-C7R
- 007: FW-2-018-438-C7R
- 008: FW-2-018-437-C7R
- 009: FW-2-018-436-C7R
- 010: FW-2-018-435-C7R
- 011: FW-2-018-434-C7R
- 012: FW-2-018-433-C7R
- 013: FW-2-018-432-C7R
- 014: FW-2-018-431-C7R
- 015: FW-2-018-430-C7R
- 016: FW-2-018-429-C7R
- 017: FW-2-018-428-C7R
- 018: FW-2-018-427-C7R
- 019: FW-2-018-426-C7R

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: FEEDWATER

T/SCH: (18\"/>

BRP: FW-2-RB-014, FW-2-RB-018, FW-2-RB-029,

FW-2-RB-031

FLOW: M2-0203

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RBMays BS May 2-1-94*

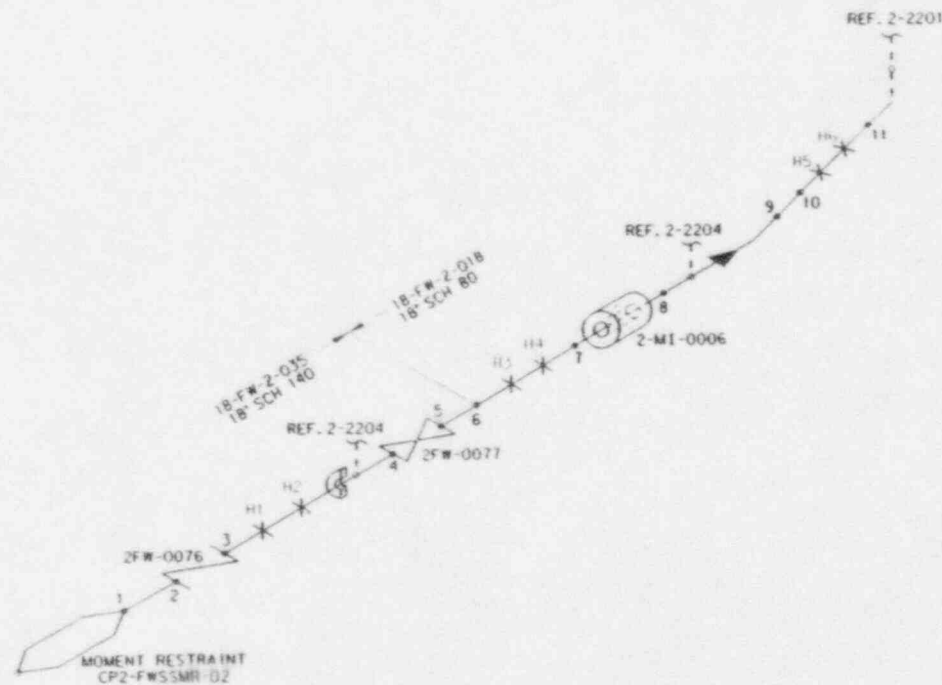
TCX-2-2201

REV. 2

09-01-94

TCX-2-2201-151

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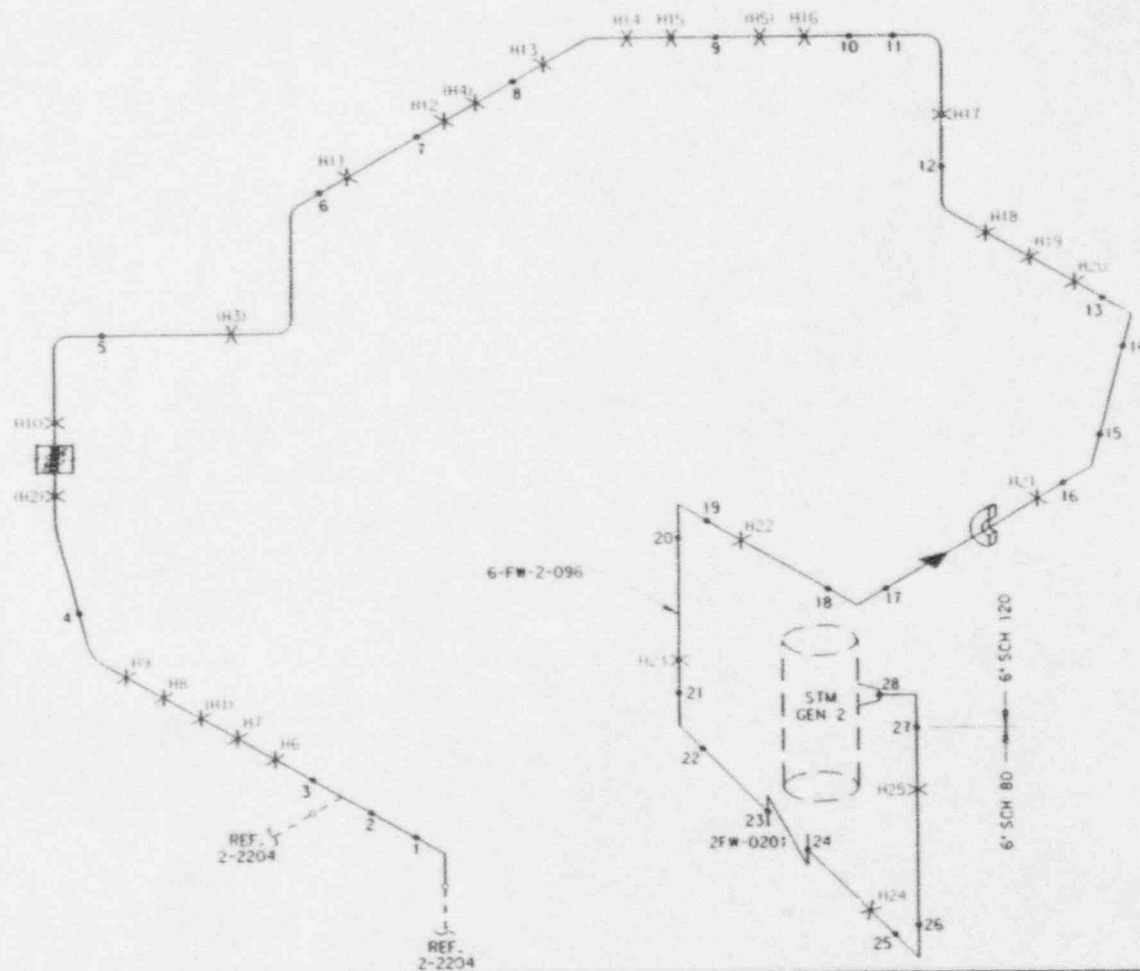


H1 : FW-2-018-435-562R
H2 : FW-2-018-432-562R
H3 : FW-2-018-433-562R
H4 : FW-2-018-433-562R
H5 : FW-2-018-433-562R
H6 : FW-2-018-434-562R

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: FEEDWATER	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (18")1.562"/140, (18")938"/80			
	BRP: FW-2-RB-013, FW-2-SB-003A, FW-2-SB-003B	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FLOW: M2-0203			
APPROVAL: <i>RB May RB May 9.1.94</i>		TCX-2-2202	REV. 1	09-01-94

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- H11: FW-2-096-205-C6.2R
- H12: FW-2-096-432-C6.2R
- H13: FW-2-096-428-C6.2R
- H14: FW-2-096-422-C6.2R
- H15: FW-2-096-710-C6.2R
- H16: FW-2-096-435-C6.2R
- H17: FW-2-096-430-C6.2R
- H18: FW-2-096-433-C6.2R
- H19: FW-2-096-434-C6.2R
- H20: FW-2-096-704-C6.2R
- H21: FW-2-096-424-C6.2R
- H22: FW-2-096-423-C6.2R
- H23: FW-2-096-418-C6.2R
- H24: FW-2-096-416-C5.2R
- H25: FW-2-096-709-C6.2R
- H26: FW-2-096-711-C6.2R
- H27: FW-2-096-712-C6.2R
- H28: FW-2-096-409-C6.2R
- H29: FW-2-096-410-C6.2R
- H30: FW-2-096-713-C6.2R
- H31: FW-2-096-407-C6.2S
- H32: FW-2-096-708-C6.2R
- H33: FW-2-096-403-C6.2R
- H34: FW-2-096-707-C6.2S
- H35: FW-2-096-402-C6.2R

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: FEEDWATER

T/SCH: (6\"/>

BRP: FW-2-RB-002, FW-2-RB-004, FW-2-RB-006

FLOW: M2-0203

TU ELECTRIC
CPSES UNIT 2

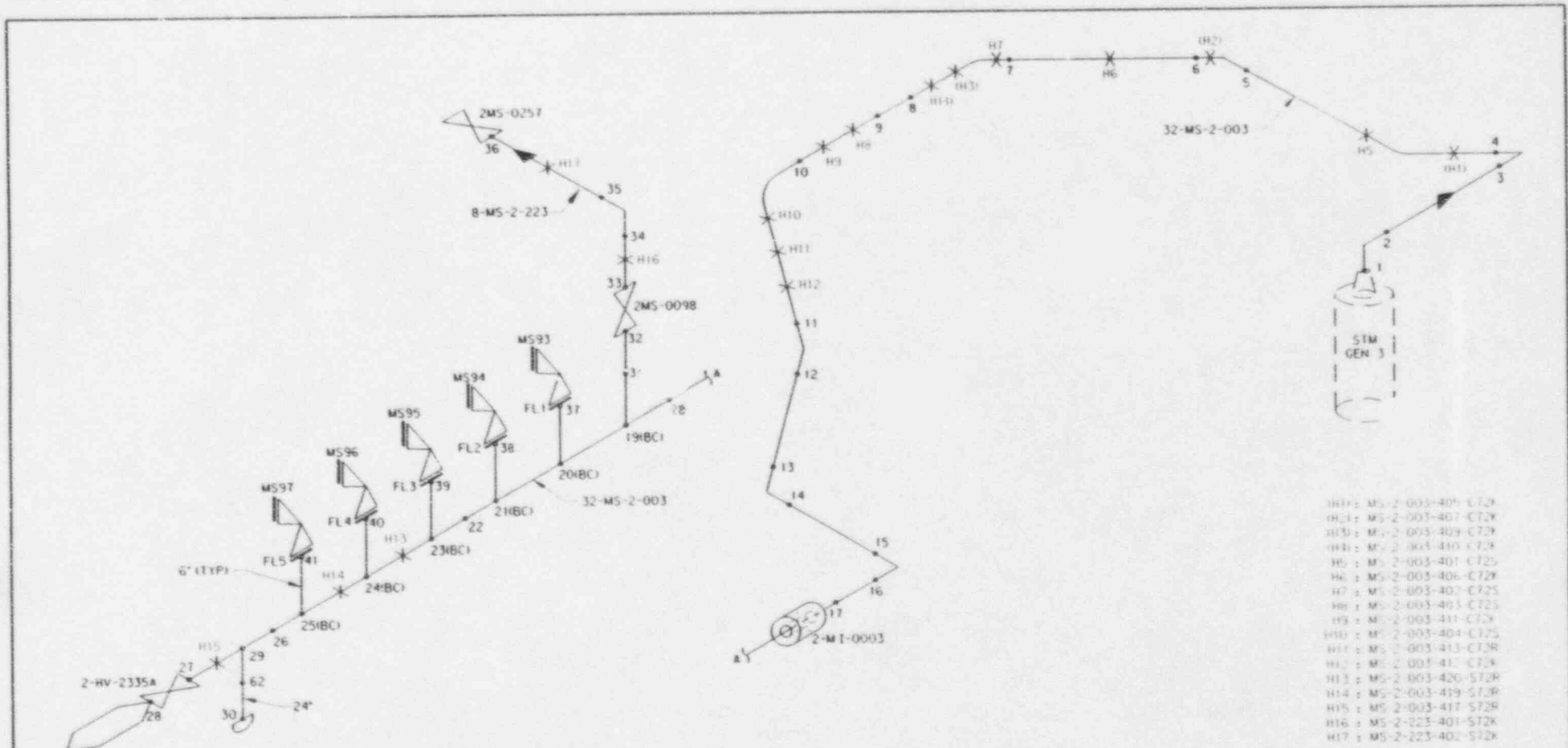
INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB May RB May 2-1-94*

TCX-2-2203

REV. 2

09-01-94



MOMENT RESTRAINT
CP2-MSMEMR-03

ILLUSTRATIVE USE ONLY

NOTES: LONGITUDINAL WELDS: 1L, 2L, 3L, 4L, 5L, 6L, 7L, 8L, 9L, 10L, 11L, 12L, 13L, 14L, 15L, 16L, 17L, 18L, 22L, 26L.

DESCRIPTION: MAINTEAM

T/SCH: (32")1.25"/MIN WALL, (24")1.531"/100, (24")1.219"/80.

$$(8^\circ).719^\circ/160, (8^\circ).500^\circ/80, (6^\circ).719^\circ/160$$

BRP: MS-2-RB-020, MS-2-RB-021, MS-2-RB-026.

MS-2-SB-018, MS-2-SB-054

FLOW: M2-0202

TU ELECTRIC
CPSES UNIT 2

INSERVICE	INSPECTION
LOCATION	ISOMETRIC

TCX-2-2300

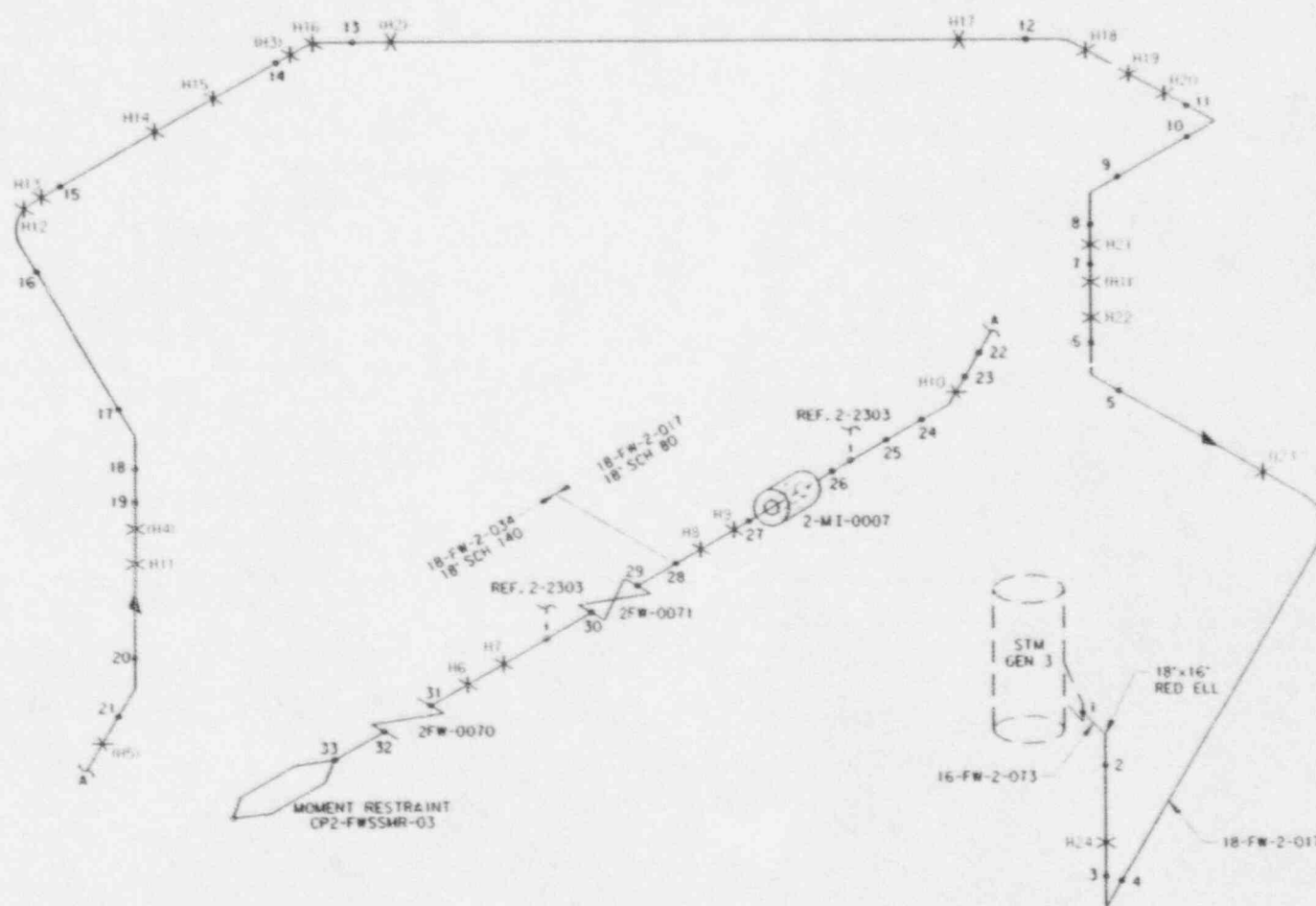
REV. 3

09-01-94

APPROVAL: *ZB Mac* *BBK* 9-1-94

TCX223003.1S1

7/6/94

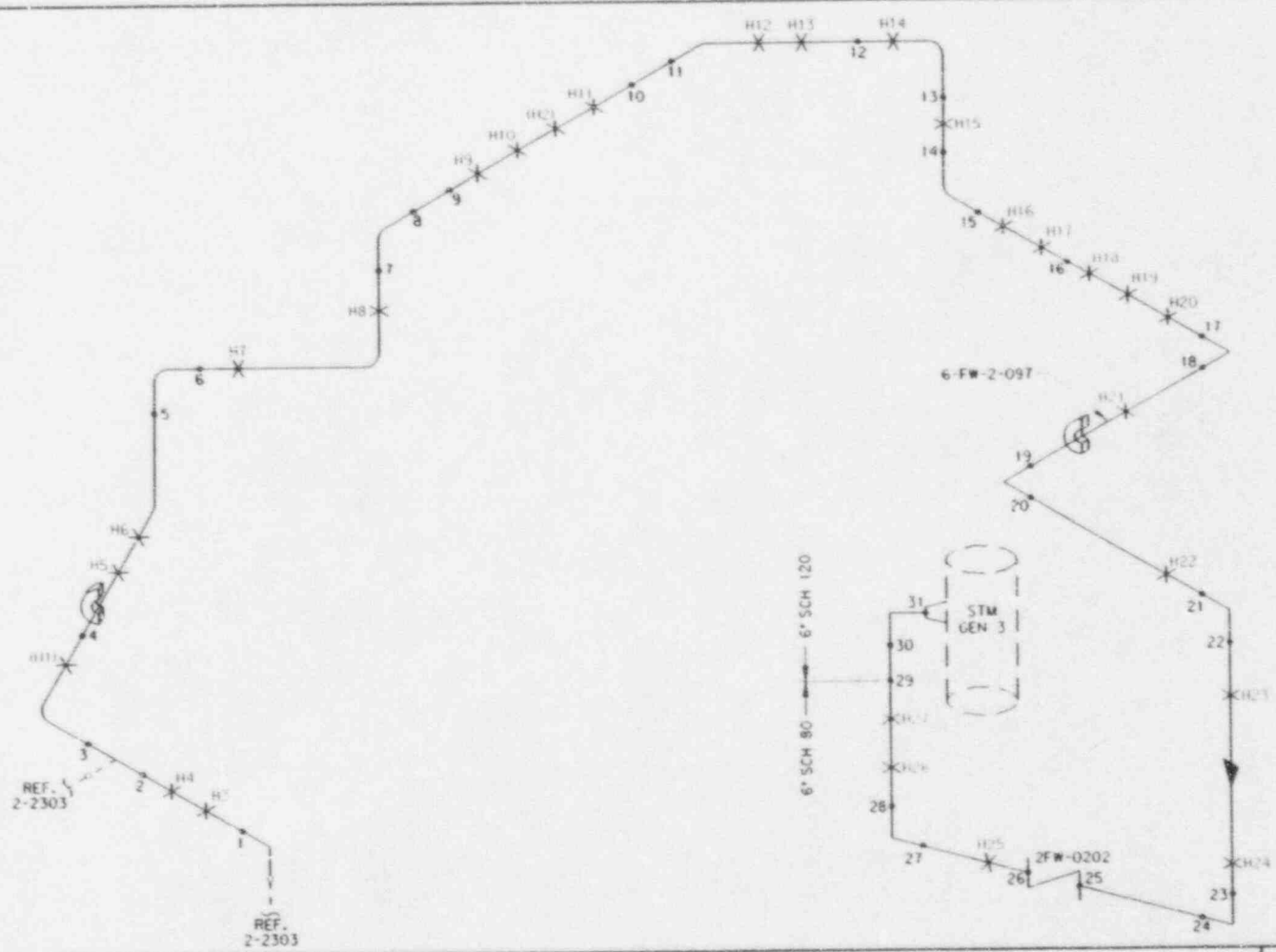


- H012: FW-2-017-401-C52R
- H013: FW-2-017-411-C52R
- H014: FW-2-017-421-C52R
- H015: FW-2-017-431-C52R
- H016: FW-2-017-441-C52R
- H017: FW-2-017-451-C52R
- H018: FW-2-017-461-C52R
- H019: FW-2-017-471-C52R
- H020: FW-2-017-481-C52R
- H021: FW-2-017-491-C52R
- H022: FW-2-017-501-C52R
- H023: FW-2-017-511-C52R
- H024: FW-2-017-521-C52R

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: FEEDWATER	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (18")1,562"/140, (18")938"/80, (16")844"/80			
	BRP: FW-2-RB-015, FW-2-RB-016, FW-2-RB-017,	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FW-2-RB-030, FW-2-RB-032, FW-2-SB-004A, FW-2-SB-004B			
APPROVAL: RB/Mcy AB/17 9.1.94	FLOW: M2-0203	TCX-2-2301	REV. 2	09-01-94

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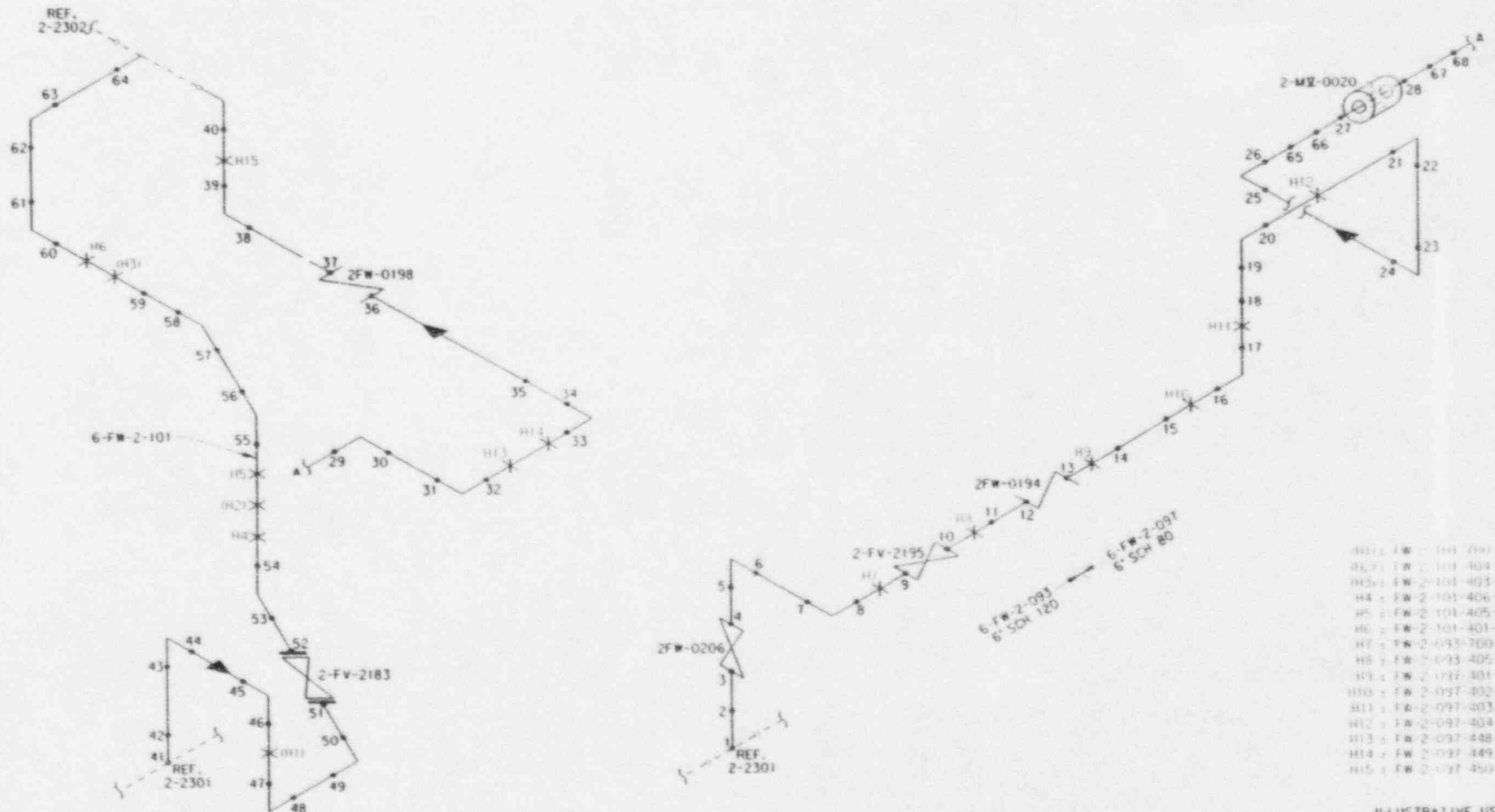
- H03 : FW-2-097-701 C62R
- H04 : FW-2-097-704 C62R
- H05 : FW-2-097-705 C62R
- H06 : FW-2-097-706 C62R
- H07 : FW-2-097-707 C62R
- H08 : FW-2-097-708 C62R
- H09 : FW-2-097-709 C62R
- H10 : FW-2-097-710 C62R
- H11 : FW-2-097-711 C62R
- H12 : FW-2-097-712 C62R
- H13 : FW-2-097-713 C62R
- H14 : FW-2-097-714 C62R
- H15 : FW-2-097-715 C62R
- H16 : FW-2-097-716 C62R
- H17 : FW-2-097-717 C62R
- H18 : FW-2-097-718 C62R
- H19 : FW-2-097-719 C62R
- H20 : FW-2-097-720 C62R
- H21 : FW-2-097-721 C62R
- H22 : FW-2-097-722 C62R
- H23 : FW-2-097-723 C62R
- H24 : FW-2-097-724 C62R
- H25 : FW-2-097-725 C62R
- H26 : FW-2-097-726 C62R
- H27 : FW-2-097-727 C62R

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: FEEDWATER	TU ELECTRIC CPSES UNIT 2		
	T/SCH: 16", 562" / 120, 16", 432" / 80			
	BRP: FW-2-RB-001, FW-2-RB-003, FW-2-RB-005	INSERVICE INSPECTION LOCATION ISOMETRIC		
APPROVAL: RB Mays RB Mays E-1-94	FLOW: M2-U203	TCX-2-2302	REV. 3	09-01-94

APPROVAL: *RBMays* *8/1/94*

TCX-23023.151

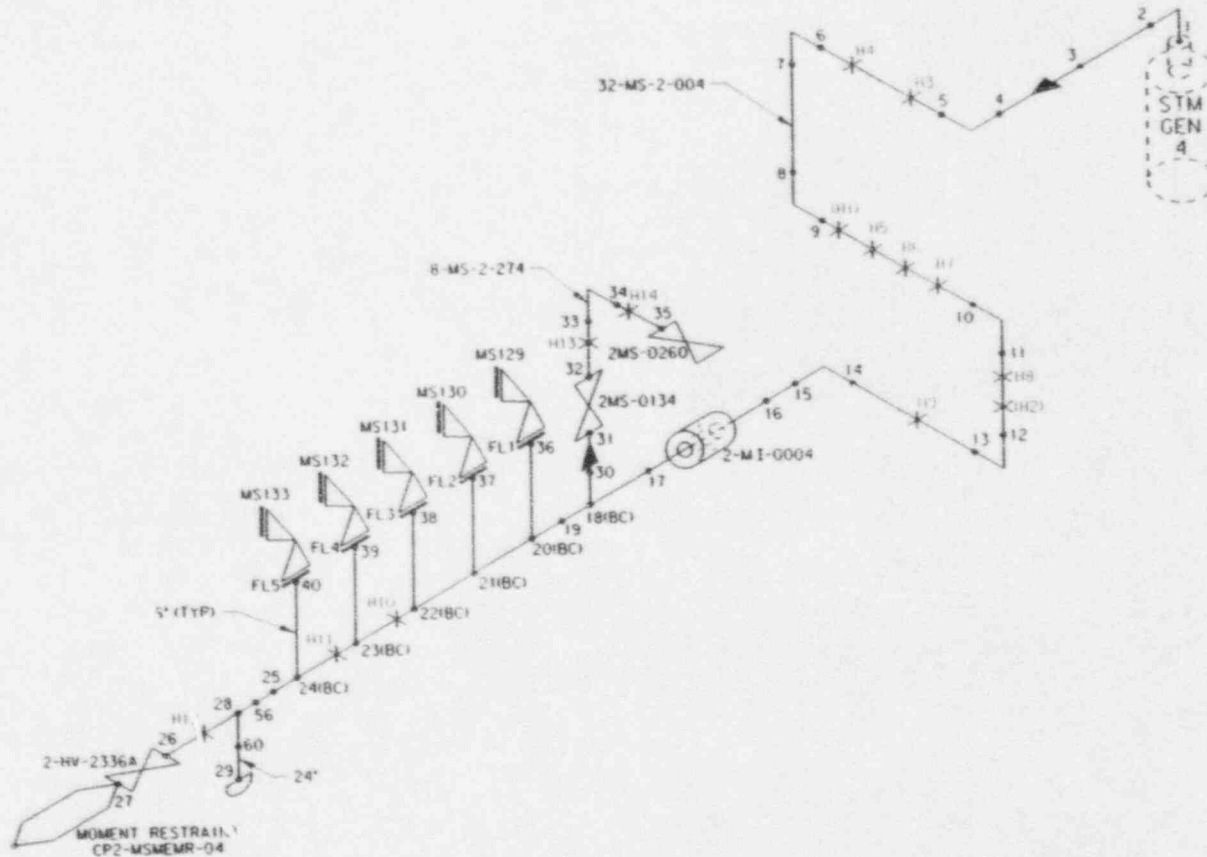
$$78/134$$


H11.1	F	2	101	404	C2.2R
H11.2	F	2	101	404	C2.3R
H11.3	F	2	101	403	C6.2R
H11.4	F	2	101	406	C5.2R
H11.5	F	2	101	405	C5.2R
H11.6	F	2	101	401	C6.2R
H11.7	F	2	033	700	56.2R
H11.8	F	2	033	405	56.2R
H11.9	F	2	033	401	56.2R
H11.10	F	2	037	402	56.1R
H11.11	F	2	097	403	56.1R
H11.12	F	2	097	404	56.2R
H11.13	F	2	037	448	C6.3
H11.14	F	2	037	449	C6.3R
H11.15	F	2	027	450	C6.2R

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: FEEDWATER	TU ELECTRIC CPSES UNIT 2		
	T/SCH: 16", 562"/120, 16", 432"/80			
		INSERVICE INSPECTION LOCATION ISOMETRIC		
	BRP: FW-2-RB-003, FW-2-RB-009, FW-2-RB-025,			
	FW-2-SB-029			
APPROVAL: <i>RB Mays JR Map 9-1-94</i>	FLOW: M2-0203	TCX-2-2303	REV. 3	09-01-94

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- H11 : MS-2-004-407-C72K
- H12 : MS-2-004-408-C72K
- H13 : MS-2-004-409-C72K
- H14 : MS-2-004-401-C72K
- H15 : MS-2-004-402-C72K
- H16 : MS-2-004-403-C72K
- H17 : MS-2-004-404-C72K
- H18 : MS-2-004-405-C72K
- H19 : MS-2-004-406-C72K
- H20 : MS-2-004-407-C72K
- H21 : MS-2-004-408-C72K
- H22 : MS-2-004-409-C72K
- H23 : MS-2-004-401-C72K
- H24 : MS-2-004-402-C72K

ILLUSTRATIVE USE ONLY

NOTES: LONGITUDINAL WELDS:
1L, 2L, 3L, 4L, 5L, 6L, 7L, 8L, 9L, 10L, 11L,
12L, 13L, 14L, 15L, 16L, 17L, 19L, 25L, 26L

DESCRIPTION: MAINSTEAM

T/SCH: (32")1.25"/MIN. WALL, (24")1.531"/100, (24")1.219"/80,
(8")1.719"/160, (8")1.500"/80, (6")1.719"/160

BRP: MS-2-RB-024, MS-2-RB-028, MS-2-SB-020,

MS-2-SB-055

FLOW: M2-0202

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

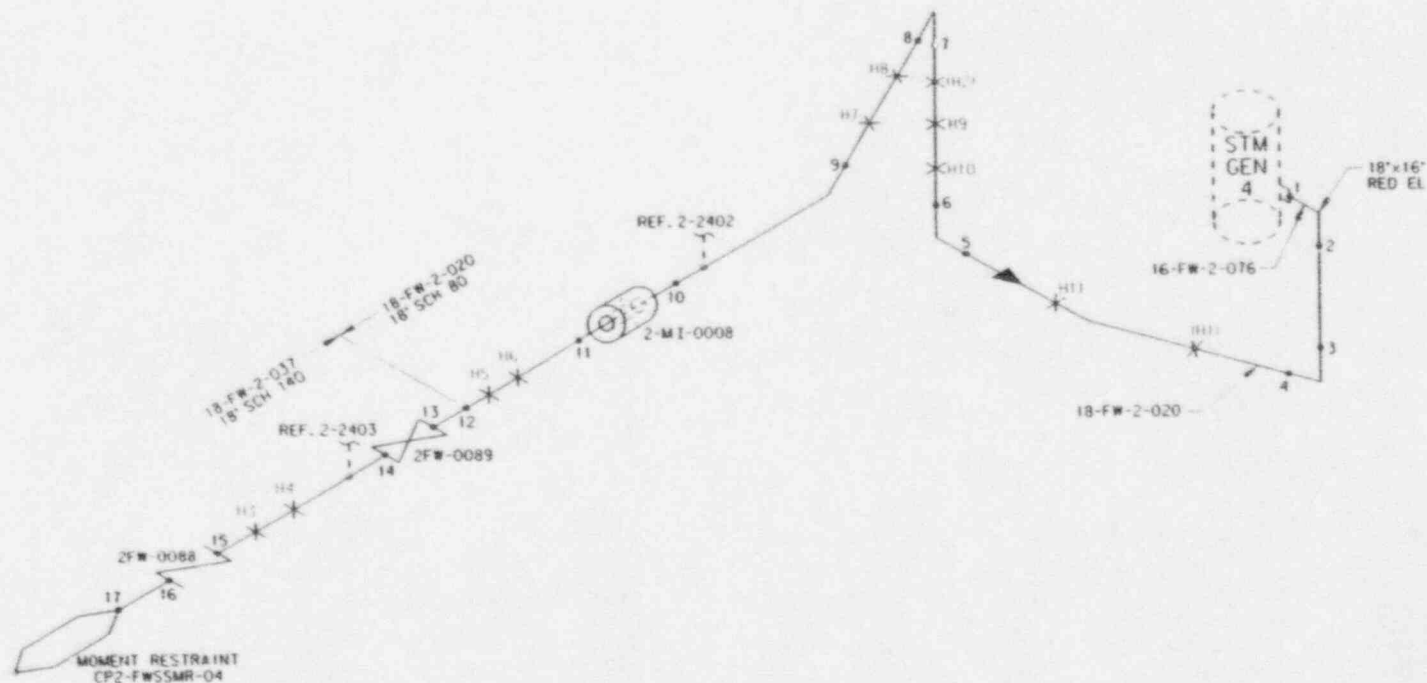
APPROVAL: *FB May 16/94*

TCX-2-2400

REV. 3

09-01-94

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- H01 : FW-2-020-403-C42K
- H02 : FW-2-020-701-C52R
- H3 : FW-2-037-401-S62R
- H4 : FW-2-037-402-S62R
- H5 : FW-2-020-414-S62R
- H6 : FW-2-020-413-S62R
- H7 : FW-2-020-402-C52S
- H8 : FW-2-020-407-C52K
- H9 : FW-2-020-416-C52R
- H10 : FW-2-020-701-C42K
- H11 : FW-2-020-410-C42S

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: FEEDWATER

T/SCH: (18")1,562"/140, (18")1,938"/80, (16")1,844"/80

BRP: FW-2-RB-010, FW-2-RB-019, FW-2-SB-002A,

FW-2-SB-002B

FLOW: M2-0203

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB May 9-1-94*

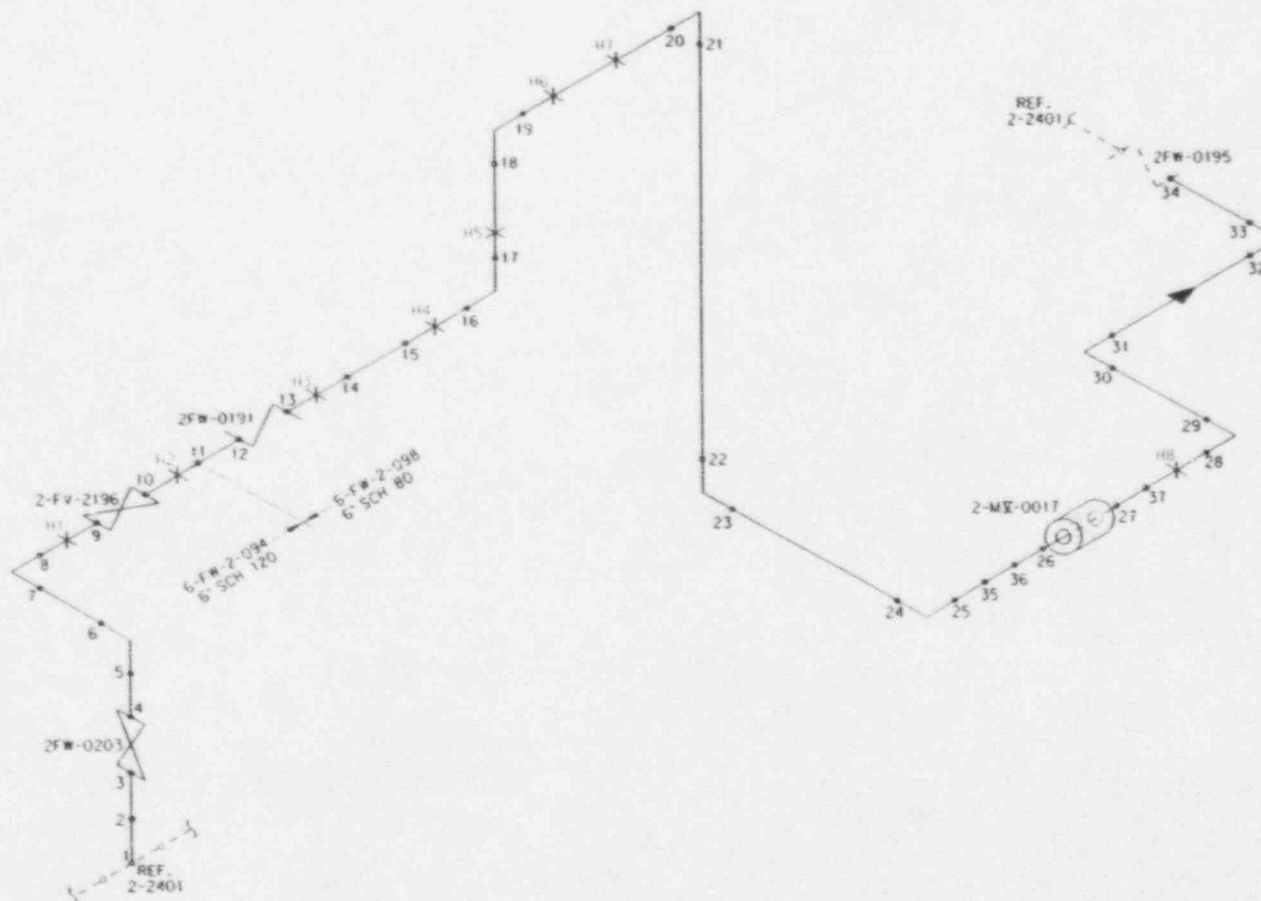
TCX-2-2401

REV. 2

09-01-94

TCX-224012,1S1

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- H1 : FW-2-094-404-56.3F
- H2 : FW-2-094-401-56.3F
- H3 : FW-2-098-411-56.3F
- H4 : FW-2-098-420-56.3F
- H5 : FW-2-098-419-56.3F
- H6 : FW-2-098-418-56.3F
- H7 : FW-2-098-422-56.3F
- H8 : FW-2-098-401-56.3F

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: FEEDWATER

T/SCH: (6")562"/120, (6")432"/80

BRP: FW-2-RB-028, FW-2-SB-032

FLOW: M2-0203

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

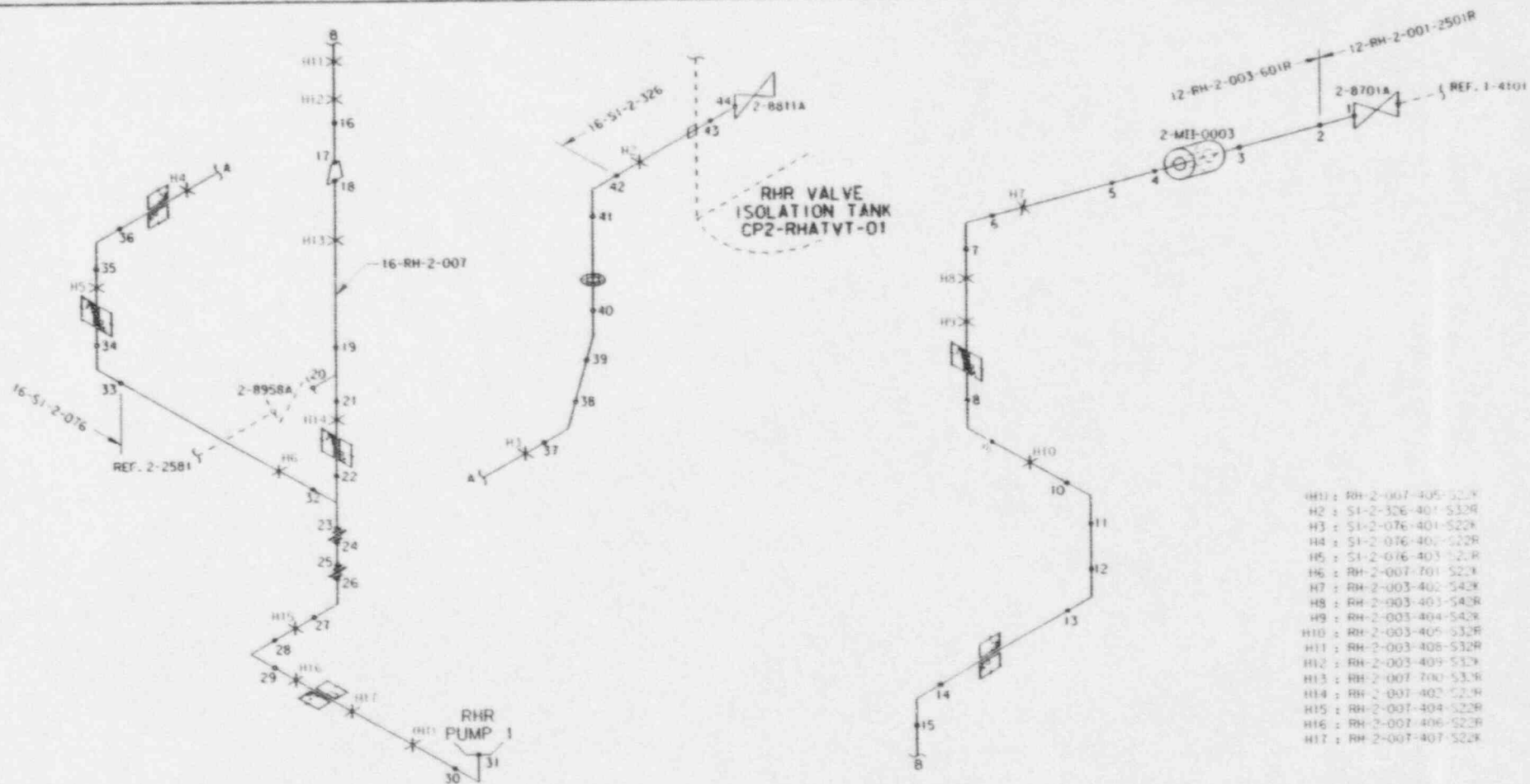
APPROVAL: *RB May* *AS May* 8-1-94

TCX-2-2403

REV. 2

09-01-94

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ILLUSTRATIVE USE ONLY

NOTES: LONGITUDINAL WELDS:
2L, 3L, 4L, 5L, 6L, 7L, 8L, 9L, 10L, 11L, 12L, 13L, 14L, 15L,
16L, 17L, 18L, 19L, 21L, 22L, 27L, 28L, 29L, 30L, 32L,
33L, 34L, 35L, 36L, 37L, 38L, 39L, 40L, 41L

DESCRIPTION: RHR AND SAFETY INJECTION
T/SCH: (16"), 500"/MIN. WALL, (14"), 500"/MIN. WALL,
(12") 11, 125"/140, (12"), 406"/40
BRP: RH-2-RB-001, RH-2-SB-001, RH-2-SB-002,
RH-2-SB-027, SI-2-RB-087, SI-2-SB-024, SI-2-SB-027
FLOW: M2-0260

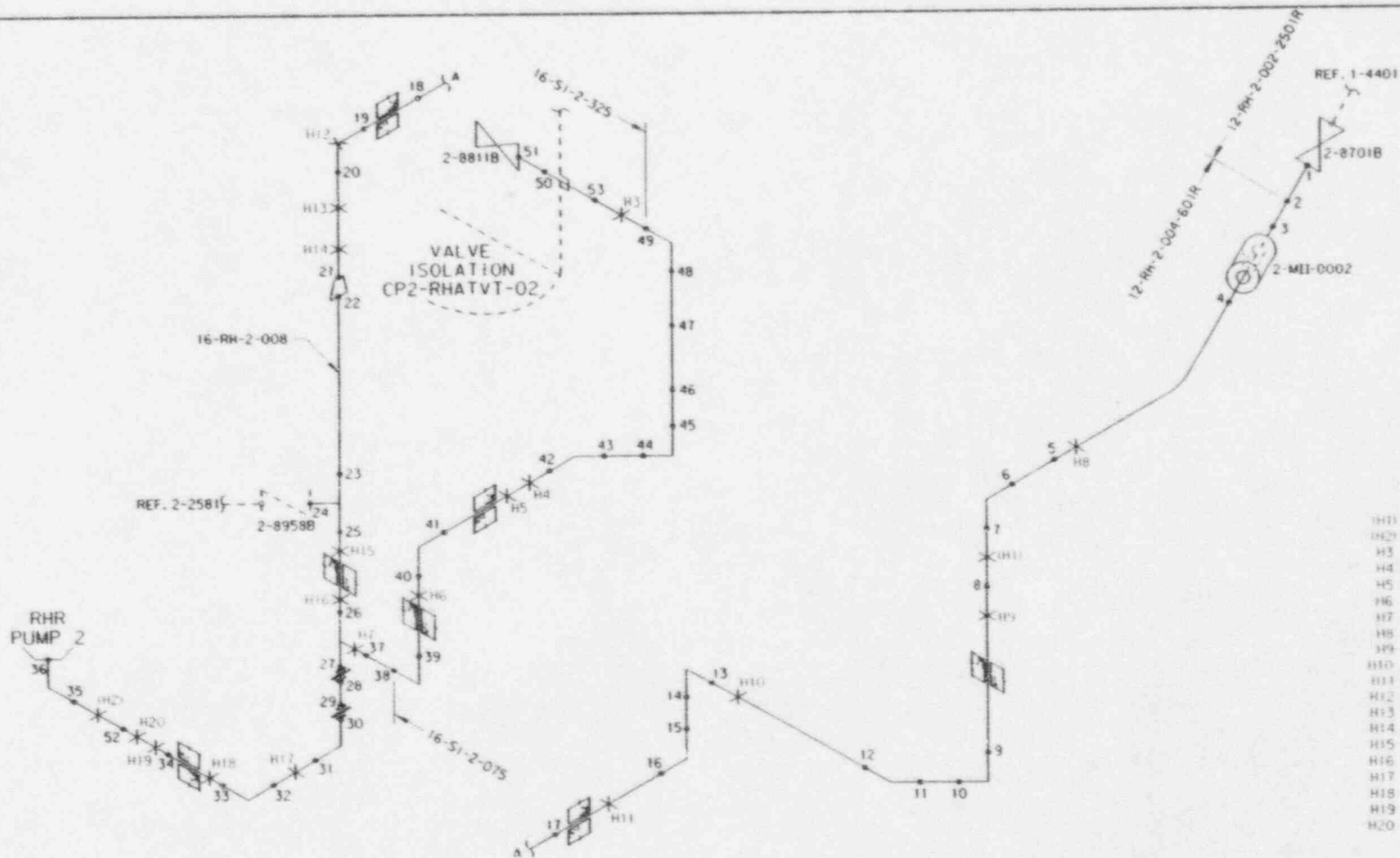
TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB May* *BS* *5-1-94*

TCX-2-2500 REV. 3 09-01-94

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- H11 : RH-2-004-403-S2R
- H12 : RH-2-008-405-S2R
- H13 : SI-2-325-700-S2R
- H14 : SI-2-075-401-S2R
- H15 : SI-2-075-402-S2R
- H16 : SI-2-075-403-S2R
- H17 : RH-2-008-403-S2R
- H18 : RH-2-004-402-S4R
- H19 : RH-2-004-404-S4R
- H20 : RH-2-004-405-S4R
- H21 : RH-2-004-406-S2R
- H22 : RH-2-004-407-S2R
- H23 : RH-2-004-408-S2R
- H24 : RH-2-004-409-S2R
- H25 : RH-2-008-402-S2R
- H26 : RH-2-008-403-S2R
- H27 : RH-2-008-404-S2R
- H28 : RH-2-008-405-S2R
- H29 : RH-2-008-406-S2R
- H30 : RH-2-008-407-S2R
- H31 : RH-2-008-408-S2R

ILLUSTRATIVE USE ONLY

NOTES: LONGITUDINAL WELDS:
3L, 6L, 19L, 20L, 21L, 22L,
23L, 33L, 38L, 43L, 44L, 45L

DESCRIPTION: RESIDUAL HEAT REMOVAL

T/SCH: (16") .500" / MIN. WALL, (14") .500" / MIN. WALL,
(12") 1.125" / 140, (12") .406" / 40

BRP: SI-2-RB-088, SI-2-RB-008, SI-2-SB-004, SI-2-SB-005,
RH-2-RB-002, RH-2-SB-006, RH-2-SB-008, RH-2-SB-026

FLOW: M2-0260

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB May RB May 8-1-94*

TCX-2-2501 REV. 3 09-01-94

The diagram illustrates the RHR (Residual Heat Removal) system. Key components and connections include:

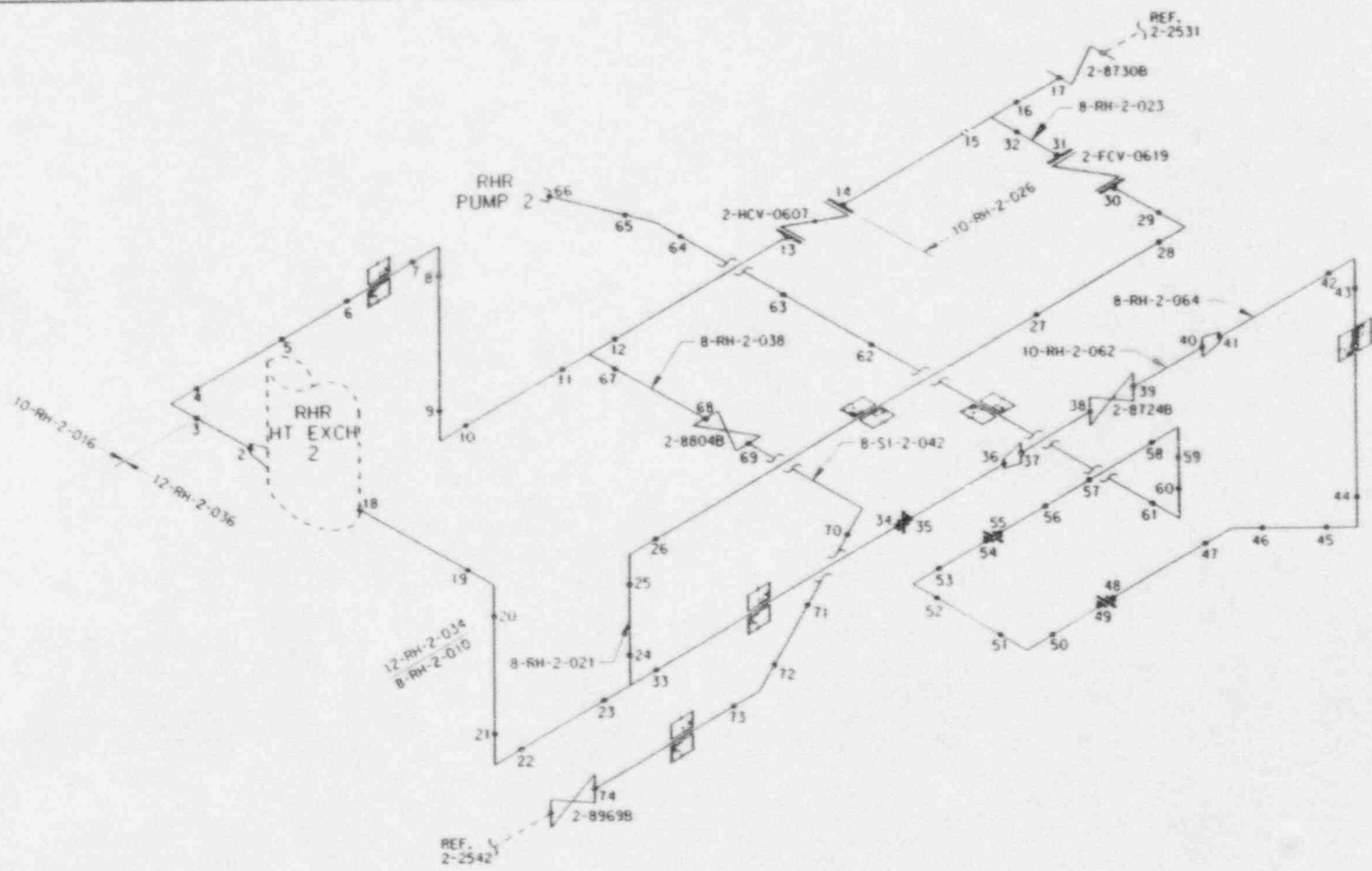
- Pumps:** 8-RH-2-009, 8-RH-2-020, 8-RH-2-022, 8-RH-2-063, 8-RH-2-037, 8-SI-2-189, 8-RH-2-025, and RHR PUMP 1.
- Heat Exchangers:** RHR HT EXCH 1, 2-8724A, 2-8804A, 2-8969A, and 2-8130A.
- Control Valves:** 2-FCV-0618, 2-HCV-0606, and 2-2530.
- Isolators:** 2-2540 and 2-2532.
- Nodes:** Numbered points from 1 to 60 indicating specific locations in the piping network.
- Flow Path:** The system shows a complex network of pipes connecting these components, with flow generally moving from the pumps towards the heat exchangers and then to the RHR PUMP 1.

ILLUSTRATIVE USE ONLY

09-01-94

RB May 15/94

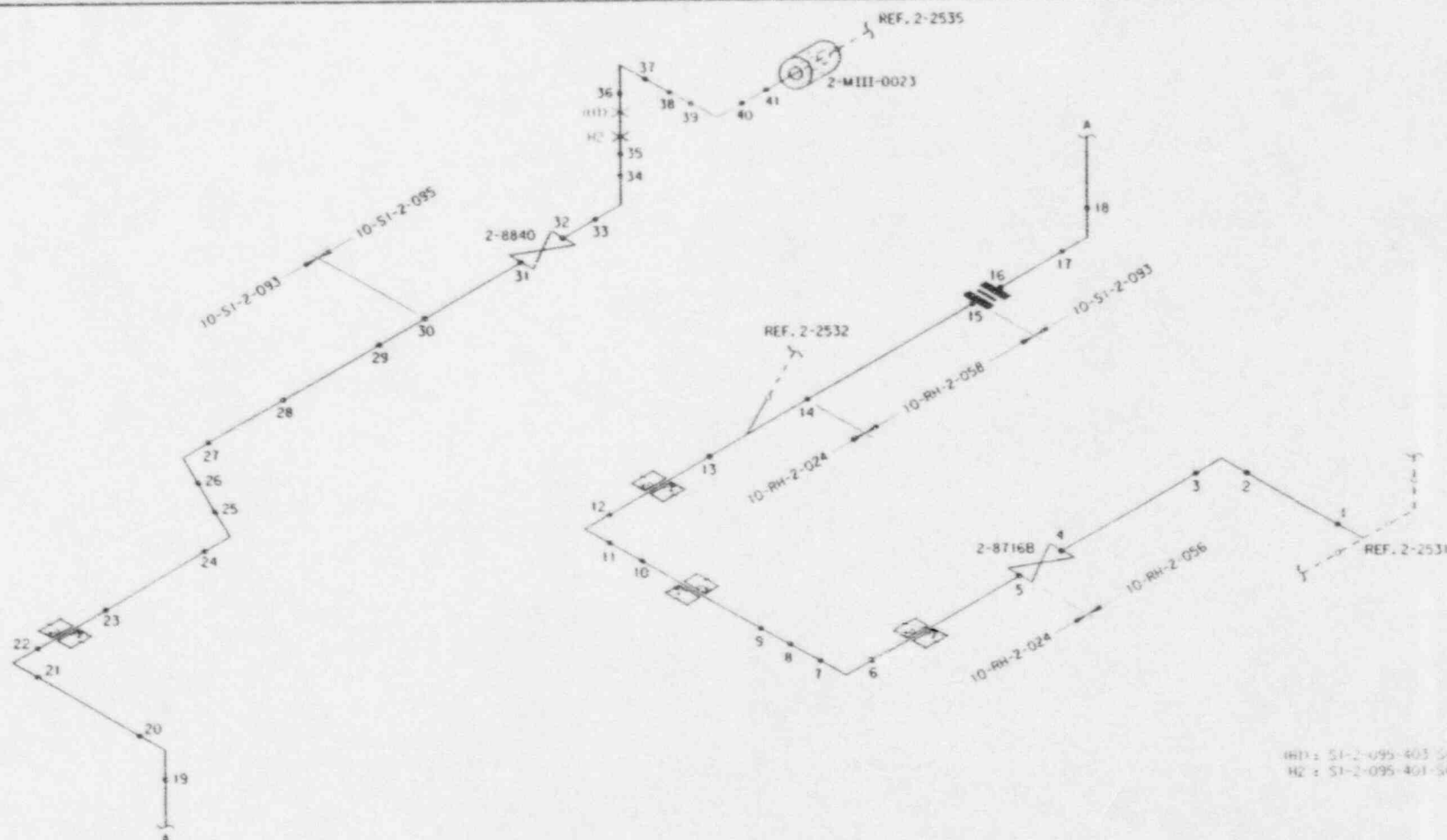
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ILLUSTRATIVE USE ONLY

<p>NOTES: 8" AND 10" SCH 40 PIPING IS INCLUDED FOR POPULATION ONLY. LONGITUDINAL WELDS: 10L, 11L, 12L, 13L, 14L, 15L, 16L, 17L, 31L, 32L, 43L, 44L, 45L, 46L, 47L, 48L, 49L, 50L, 51L, 52L, 54L, 55L, 56L, 57L, 58L, 59L, 60L, 61L, 62L, 63L, 64L, 65L, 66L, 67L, 68L, 70L, 71L, 72L, 73L, 74L</p>	DESCRIPTION: RESIDUAL HEAT REMOVAL	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (12") 406"/40, (10") 365"/40,			
	(8") 322"/40			
	BRP: RH-2-SB-007, RH-2-SB-010, RH-2-SB-011,			
<p>APPROVAL: <i>RBAlys AS May 9-1-94</i></p>	RH-2-SB-013, SI-2-SB-006	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FLOW: M2-0260			
TCX-25211.151		TCX-2-2521 REV. 1 09-01-94		

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H1: S1-2-095-403-54-R
H2: S1-2-095-401-542R

ILLUSTRATIVE USE ONLY

NOTES: 10" SCH 40 PIPING IS INCLUDED FOR POPULATION ONLY. LONGITUDINAL WELDS: 1L, 2L, 7L, 8L, 9L, 10L, 11L, 12L, 13L, 16L, 17L, 18L, 19L, 22L, 23L, 24L.

DESCRIPTION: SAFETY INJECTION/RHR

T/SCH: (10")1.00"/140, (10")1.365"/40

BRP: RH-2-SB-011, RH-2-SB-015, SI-2-SB-007,

SI-2-SB-042

FLOW: M2-0260, M2-0262, M2-0263

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL:

RB May RB May 9-1-94

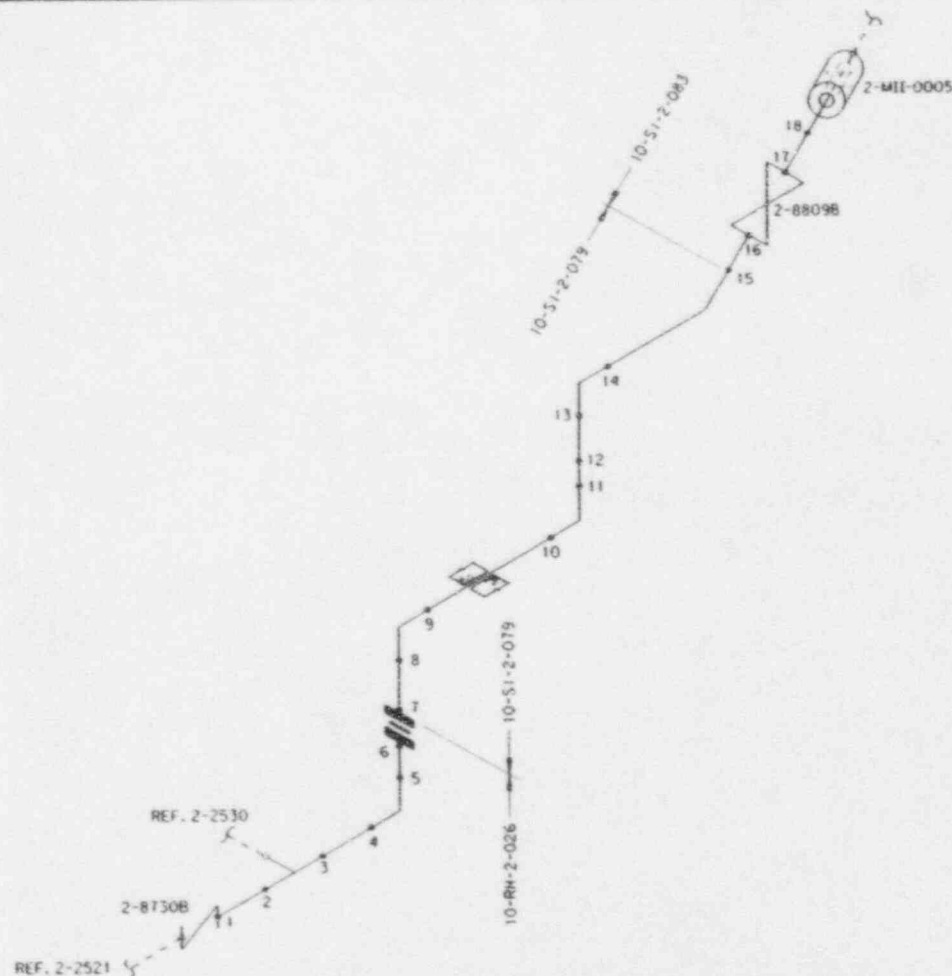
TCX-2-2530

REV. 2

09-01-94

TCX225302.1S1

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ILLUSTRATIVE USE ONLY

NOTES: 10" SCH 40 PIPING IS INCLUDED FOR POPULATION ONLY. LONGITUDINAL WELDS: 1L 2L, 3L, 4L

DESCRIPTION: SAFETY INJECTION/RHR

T/SCH: (10")1.00"/140, (10")3.65"/40

BRP: RH-2-SB-011, RH-2-SB-014, SI-2-SB-031, SI-2-SB-040

FLOW: M2-0260, M2-0262, M2-0263

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *FB/ops 06/17 9-1-94*

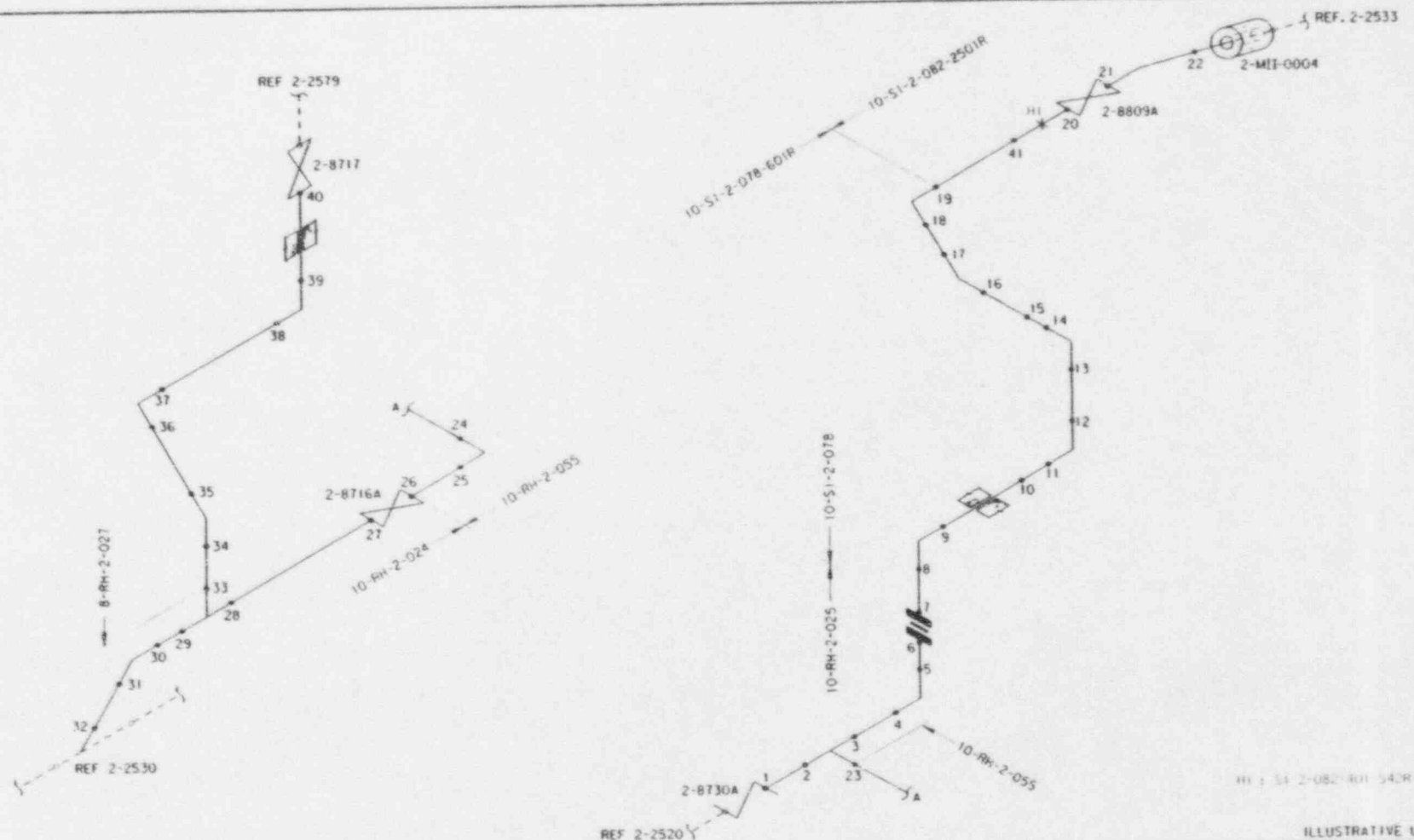
TCX-2-2531

REV. 1

09-01-94

TCX225311.1S1

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NOTES: 8" AND 10" SCH 40 PIPING IS INCLUDED FOR POPULATION ONLY. LONGITUDINAL WELDS : 5L, 6L, 7L, 8L, 9L, 10L, 11L, 12L, 13L, 14L, 15L, 16L, 17L, 18L, 19L, 20L, 23L, 24L, 25L, 26L, 33L, 34L, 35L, 36L, 37L, 38L, 39L, 40L

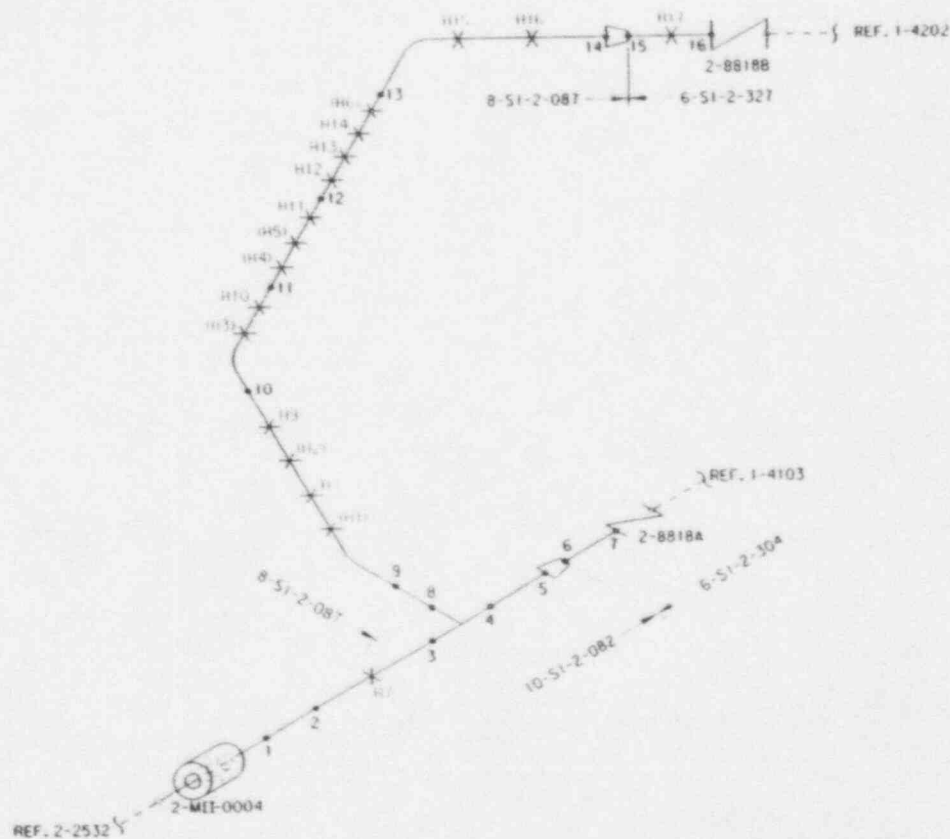
DESCRIPTION: SAFETY INJECTION/RHR
 T/SCH: (10")1.00"/140,(10")1.365"/40,(8")1.322"/40
 BRP: RH-2-SB-014, RH-2-SB-015, RH-2-SB-016, RH-2-SB-017, SI-2-SB-038, SI-2-SB-039
 CLOW: M2-0260, M2-0262, M2-0263

TU ELECTRIC
 CPSES UNIT 2
 INSERVICE INSPECTION
 LOCATION ISOMETRIC

APPROVAL: *RB Map RB Map 8-1-94*

TCX-2-2532 REV. 1 09-01-94

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- H02: SI-2-087-411 C42R
- H03: SI-2-087-412 C42R
- H04: SI-2-087-404 C42R
- H05: SI-2-087-405 C42R
- H06: SI-2-087-406 C42R
- H07: SI-2-087-407 C42R
- H08: SI-2-087-408 C42R
- H09: SI-2-087-409 C42R
- H10: SI-2-087-410 C42R
- H11: SI-2-087-411 C42R
- H12: SI-2-087-412 C42R
- H13: SI-2-087-413 C42R
- H14: SI-2-087-414 C42R
- H15: SI-2-087-415 C42R
- H16: SI-2-087-416 C42R
- H17: SI-2-327-001 C42R

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: SAFETY INJECTION

T/SCH: (10°)11.00°/140, (8°)9.06°/160, (6°)7.19°/160

BRP: SI-2-RB-026, SI-2-RB-027

FLOW: M2-0262, M2-0263

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL:

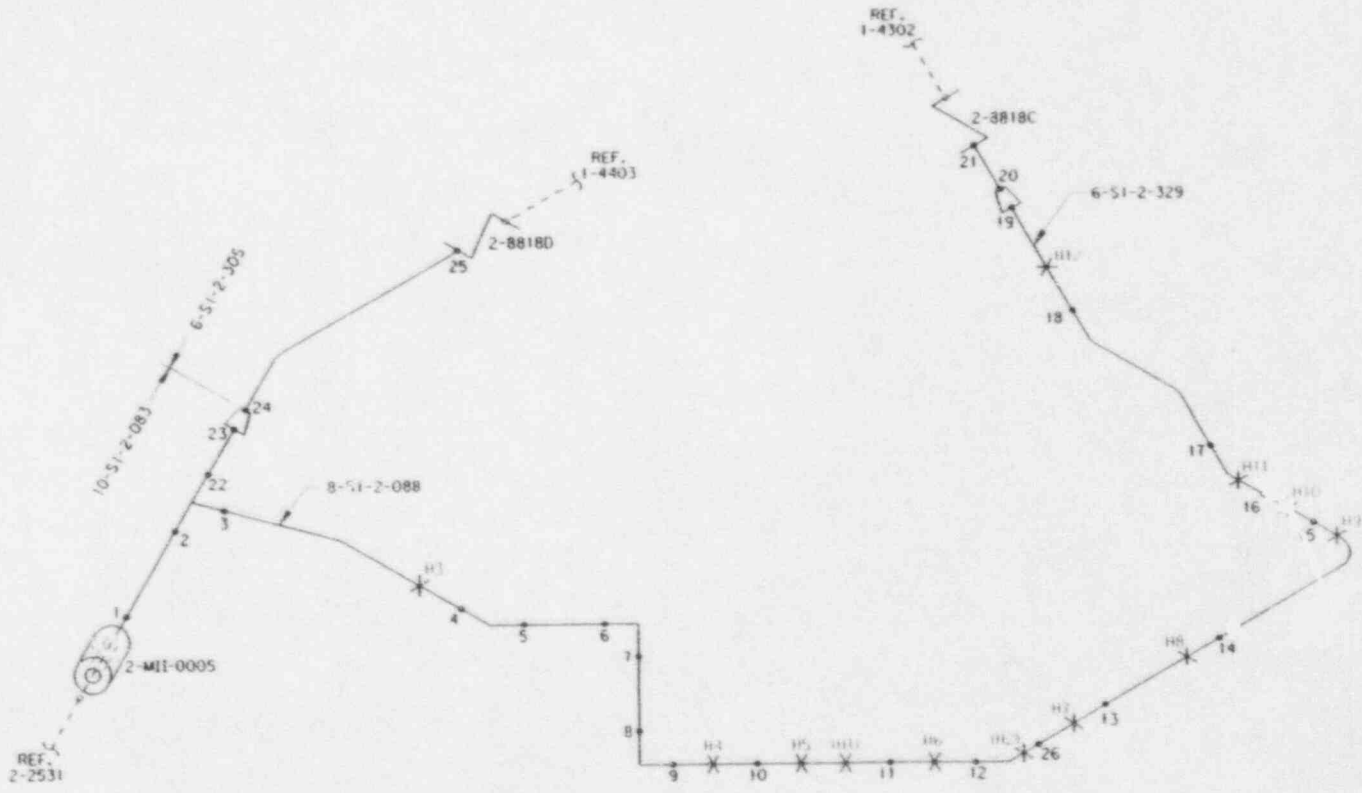
RB Mays *RB Mays* 9-1-94

TCX-2-2533

REV. 2

09-01-94

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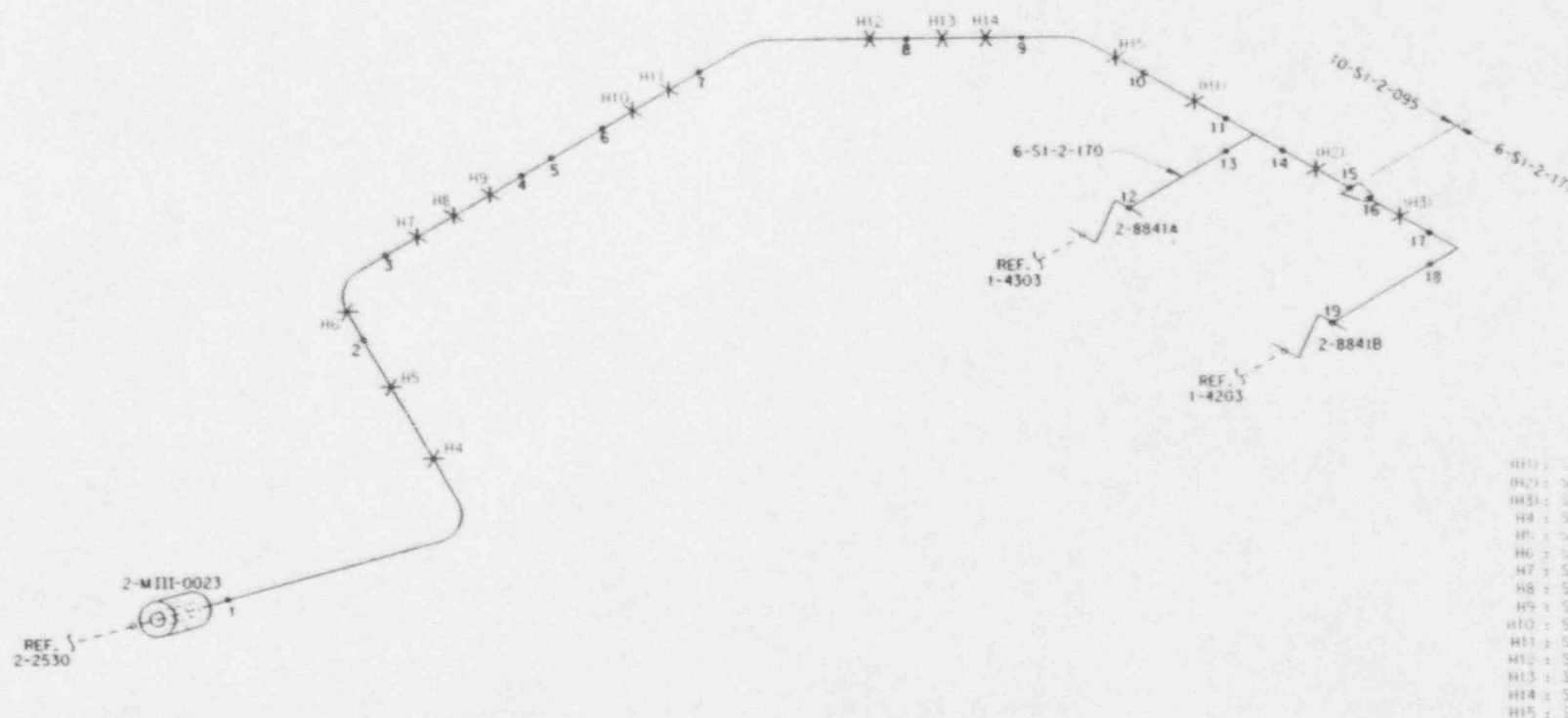


- H1: SI-2-088-409-C4R
- H2: SI-2-088-410-C4R
- H3: SI-2-088-408-C4R
- H4: SI-2-088-415-C4R
- H5: SI-2-088-414-C4R
- H6: SI-2-088-404-C4R
- H7: SI-2-088-403-C4R
- H8: SI-2-088-402-C4R
- H9: SI-2-088-412-C4R
- H10: SI-2-088-401-C4R
- H11: SI-2-088-413-C4R
- H12: SI-2-088-416-C4R

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: SAFETY INJECTION	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (10")1.00"/140, (8")1.906"/160, (6")1.719"/160			
	BRP: SI-2-RB-013, SI-2-RB-046	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FLOW: M2-0262, M2-0263			
APPROVAL: <i>RB Mays RB Mays 9-1-94</i>		TCX-2-2534	REV. 2	09-01-94

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- H01 : SI-2-095-415-C42R
- H02 : SI-2-095-409-C42R
- H03 : SI-2-171-401-C42R
- H4 : SI-2-095-418-C42R
- H5 : SI-2-095-413-C42R
- H6 : SI-2-095-420-C42R
- H7 : SI-2-095-404-C42R
- H8 : SI-2-095-405-C42R
- H9 : SI-2-095-411-C42R
- H10 : SI-2-095-412-C42R
- H11 : SI-2-095-406-C42R
- H12 : SI-2-095-416-C42R
- H13 : SI-2-095-407-C42R
- H14 : SI-2-095-413-C42R
- H15 : SI-2-095-408-C42R

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: SAFETY INJECTION

T/SCH: (110")1.00"/140, 16")1.719"/160

BRP: SI-2-RB-016, SI-2-RB-017

FLOW: M2-0262, M2-0263

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

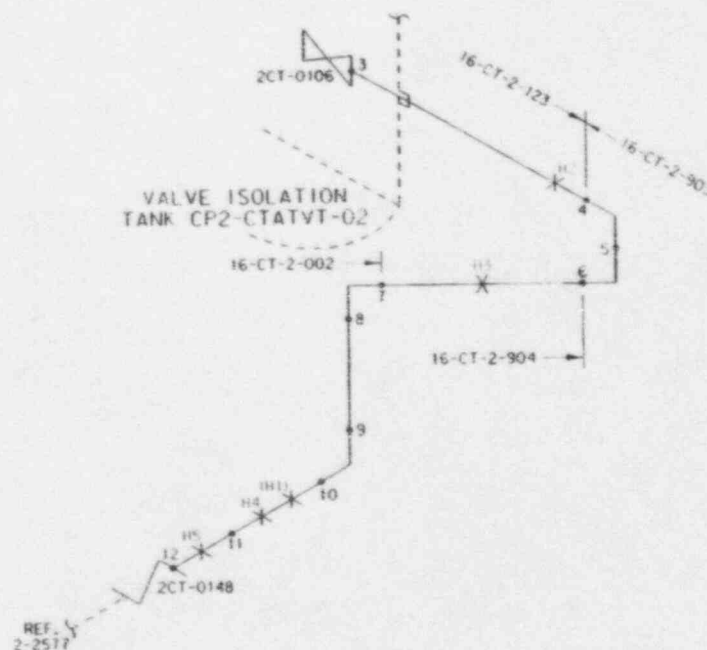
APPROVAL: *RB Mays AB May 9-1-84*

TCX-2-2535

REV. 2

09-01-94

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H1: CT-2-002-402-S2R
H2: CT-2-123-401-S32R
H3: CT-2-002-404-S37R
H4: CT-2-002-403-S27R
H5: CT-2-002-401-S22R

ILLUSTRATIVE USE ONLY

NOTES: LONGITUDINAL WELDS: 6L, 7L, 9L.
WELD NUMBERS 1 AND 2 ARE NOT USED.

DESCRIPTION: CONTAINMENT SPRAY

T/SCH: (16"), 3.75"/MIN. WALL, (16"), 3.75"/STD. WALL

BRP: CT-2-RB-092, CT-2-SB-025, CT-2-SB-034

FLOW: M2-0232

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

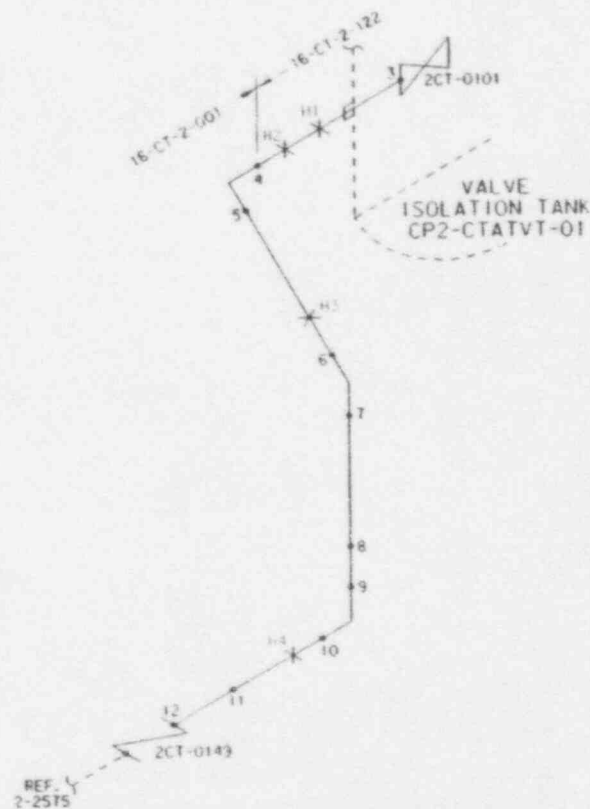
APPROVAL: *RB Mays RB Mays 2-1-94*

TCX-2-2536

REV. 2

09-01-94

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H1 : CT-2-122-404-S32R
H2 : CT-2-122-405-S32R
H3 : CT-2-001-404-S32R
H4 : CT-2-001-403-S22R

ILLUSTRATIVE USE ONLY

NOTES: LONGITUDINAL WELDS:
5L, 6L, 7L, 8L, 9L, 10L, 11L, 12L.
WELD NUMBERS 1 AND 2 ARE NOT USED.

DESCRIPTION: CONTAINMENT SPRAY

T/SCH: (16") .375" / STD. WALL

BRP: CT-2-RB-091, CT-2-SB-029, CT-2-SB-031

FLOW: M2-0232

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL:

RB May *AS May* 9-1-94

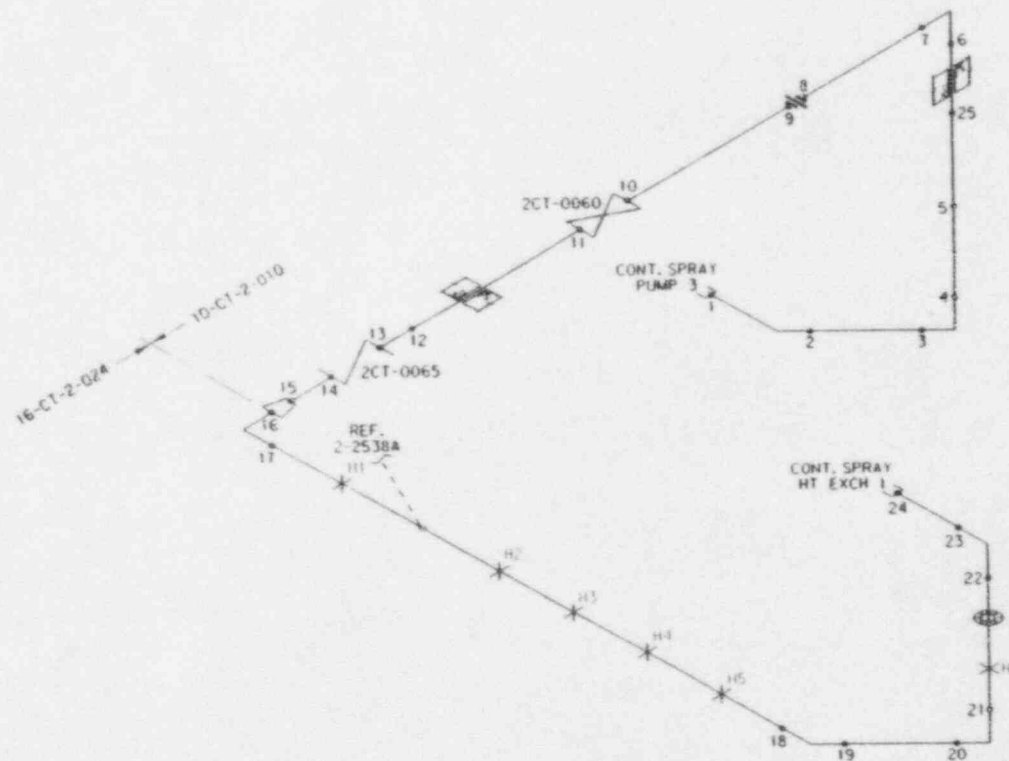
TCX-2-2537

REV. 1

09-01-94

TCX225371,ISI

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- H1 : CT-2-024-405-522R
- H2 : CT-2-024-404-522R
- H3 : CT-2-024-406-522R
- H4 : CT-2-024-407-522R
- H5 : CT-2-024-401-522R
- H6 : CT-2-024-408-522R

ILLUSTRATIVE USE ONLY

NOTES: 10" SCH 40 PIPING IS INCLUDED FOR
POPULATION ONLY. LONGITUDINAL WELDS:
17L, 18L, 19L, 20L, 21L, 22L, 23L, 24L, 25L

DESCRIPTION: CONTAINMENT SPRAY

T/SCH: (16"), 375"/MIN. WALL, (10"), 365"/40

BRP: CT-2-SB-001, CT-2-SB-003

FLOW: M2-0232

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL:

RB May BS May 9-1-94

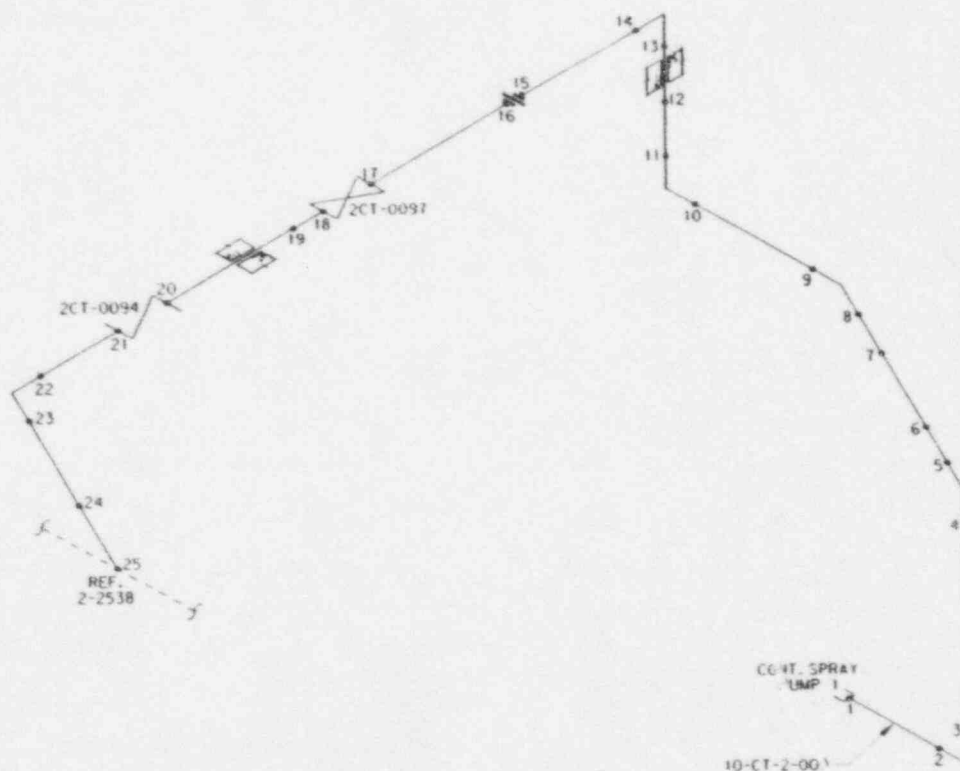
TCX-2-2538

REV. 1

09-01-94

TCX 225381, ISI

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ILLUSTRATIVE USE ONLY

NOTES: 10" SCH 40 PIPING IS INCLUDED FOR
POPULATION ONLY.

DESCRIPTION: CONTAINMENT SPRAY

T/SCH: (110") 365"/40

BRP: CT-2-SB-004

FLOW: M2-0232

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB/ays* *8/1/94* 9-1-94

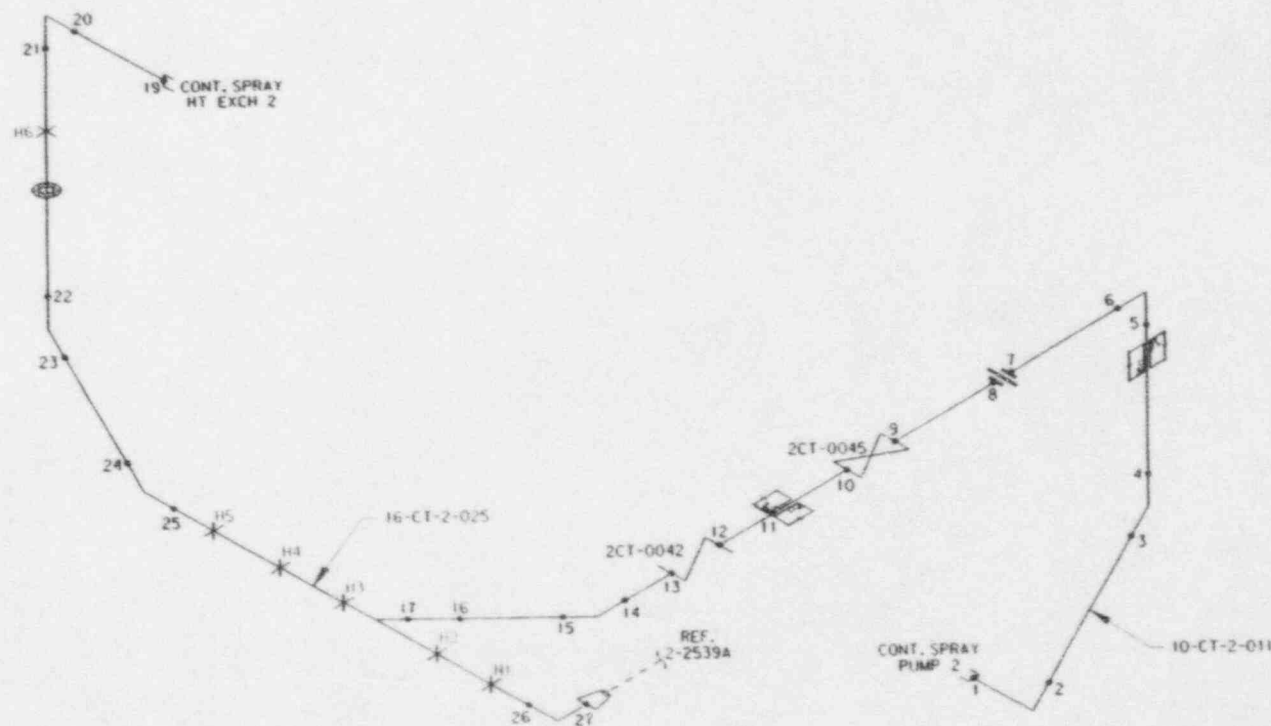
TCX-2-2538A

REV. 1

09-01-94

TCX-2538A1, ISI

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- H1 : CT-2-025-404-S22R
- H2 : CT-2-025-401-S22R
- H3 : CT-2-025-405-S22R
- H4 : CT-2-025-403-S22R
- H5 : CT-2-025-402-S22S
- H6 : CT-2-025-406-S32R

ILLUSTRATIVE USE ONLY

NOTES: 10" SCH 40 PIPING IS INCLUDED FOR
POPULATION ONLY. LONGITUDINAL WELDS:
19L, 20L, 21L, 22L, 23L, 24L, 25L, 26L
WELD NUMBER 18 IS NOT USED.

DESCRIPTION: CONTAINMENT SPRAY

T/SCH: (16") .375" / MIN. WALL, (10") .365" / 40

BRP: CT-2-SB-014, CT-2-SB-018

FLOW: M2-0232

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

TCX-2-2539

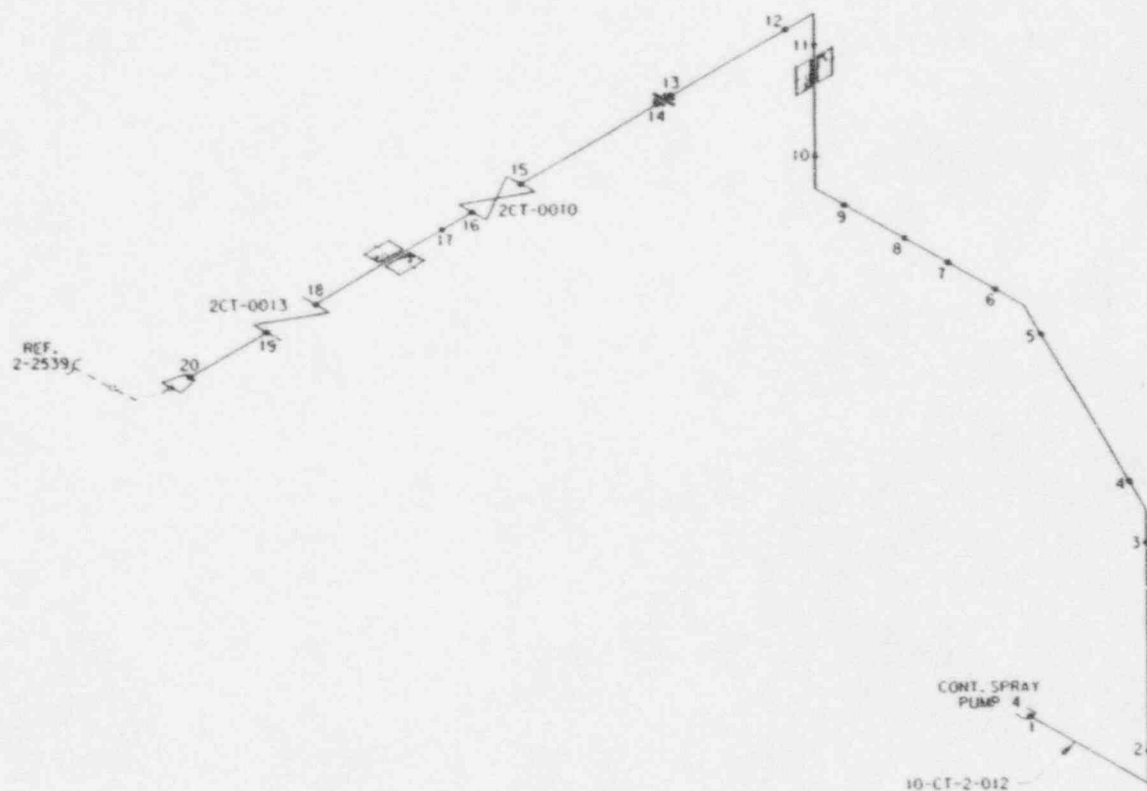
REV. 1

09-01-94

APPROVAL: *RB May BS May 9-1-94*

TCX225391.1S1

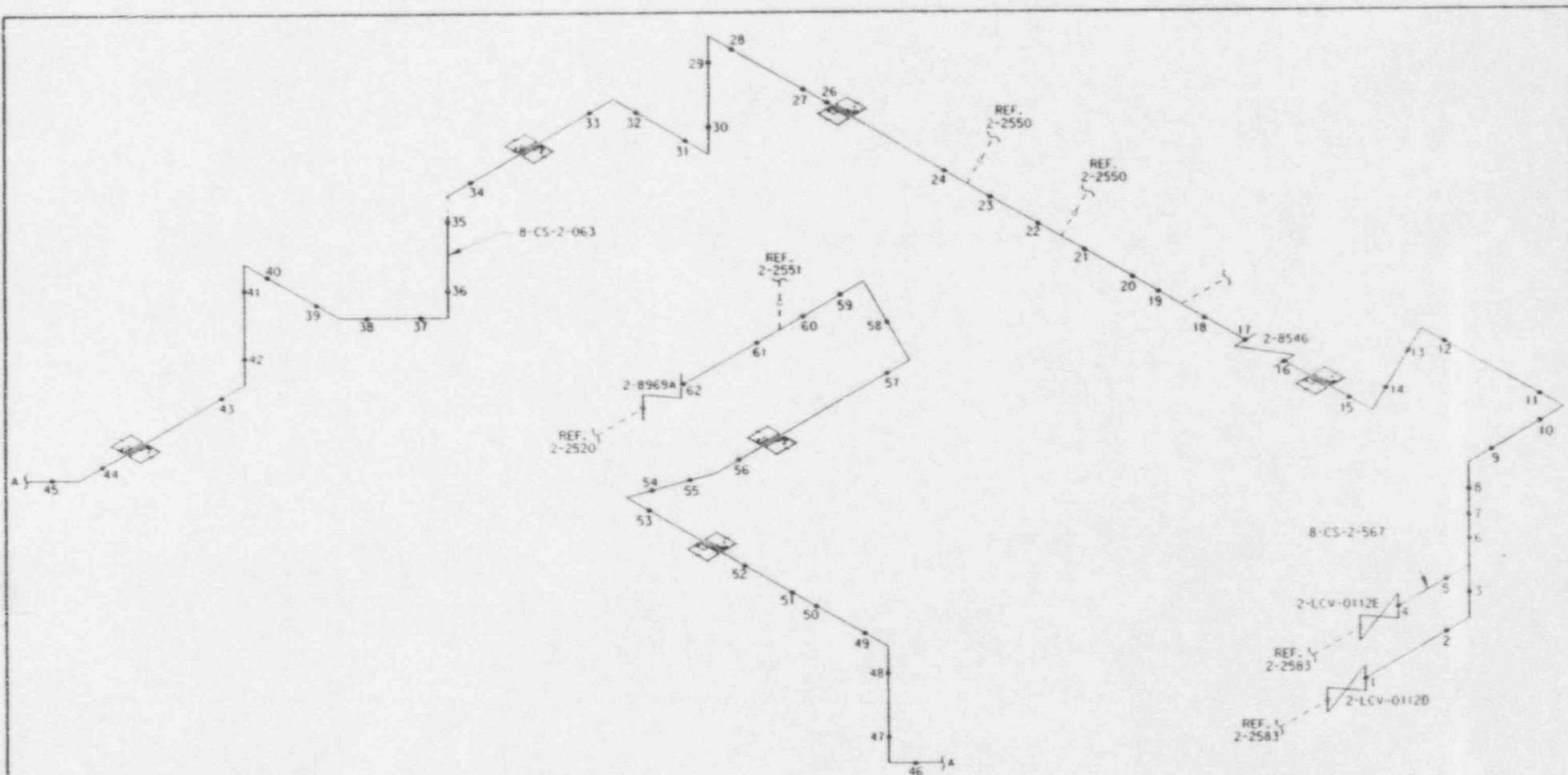
98/134



ILLUSTRATIVE USE ONLY

NOTES: 10" SCH 40 PIPING IS INCLUDED FOR POPULATION ONLY.	DESCRIPTION: CONTAINMENT SPRAY	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (10") .365"/40			
	BRP: CT-2-SB-010, CT-2-SB-018	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FLOW: M2-0232	TCX-2-2539A	REV. 1	09-01-94
APPROVAL: <i>RB May RB May 9-1-94</i>				

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NOTES: 8" SCH 40 PIPING IS INCLUDED FOR
POPULATION ONLY. LONGITUDINAL WELDS:
17L, 18L, 19L, 20L, 21L, 22L, 23L, 24L, 25L, 26L, 33L, 34L, 35L,
36L, 37L, 38L, 39L, 40L, 41L, 42L, 43L, 44L, 45L, 46L, 49L, 50L,
51L, 52L, 53L, 54L, 55L, 56L, 57L

DESCRIPTION: CS CHARGING

T/SCH: (18"), 322"/40

BRP: CS-2-AB-077, CS-2-AB-078, CS-2-SB-001,
CS-2-SB-002, CS-2-SB-003

FLOW: M2-0253

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

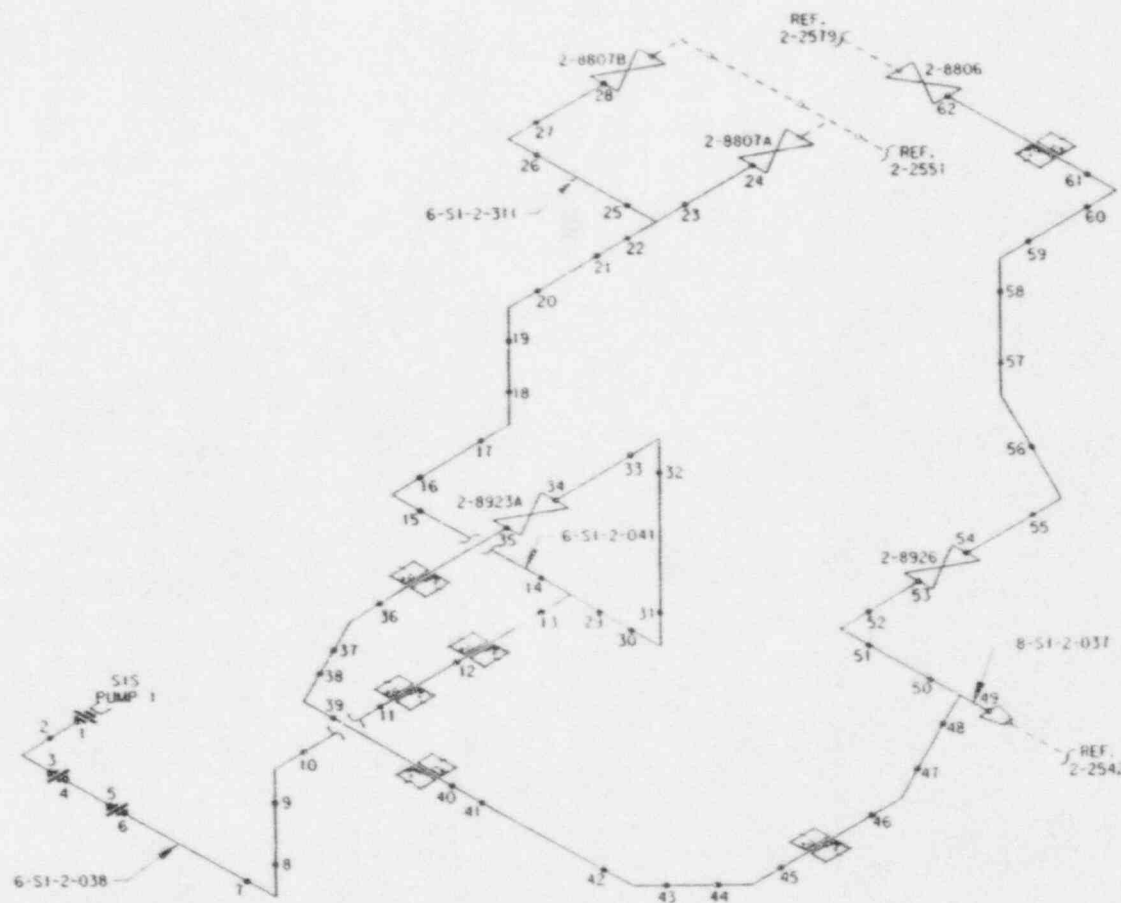
APPROVAL: *RB May 9-1-94*

TCX-2-2540

REV. 2

09-01-94

100/134



ILLUSTRATIVE USE ONLY

NOTES: 6" AND 8" SCH 40 PIPING IS INCLUDED FOR
POPULATION ONLY. LONGITUDINAL WELDS:
1L, 2L, 6L, 7L, 11L, 12L, 13L, 14L, 15L, 16L, 17L, 18L, 19L, 23L,
24L, 25L, 26L, 29L, 30L, 31L, 32L, 33L, 34L, 37L, 38L, 39L, 40L,
41L, 42L, 43L, 44L, 45L, 46L, 47L, 48L, 50L, 51L, 52L, 53L, 54L,
55L, 57L, 58L, 59L, 60L, 61L, 62L

DESCRIPTION: SAFETY INJECTION

T/SCH: (8").322"/40, (6").280"/40

BRP: S1-2-SB-001, S1-2-SB-002, S1-2-SB-003,

S1-2-SB-009, S1-2-SB-011

FLOW: M2-0262, M2-0263

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RBN May's RBN May's* 9-1-84

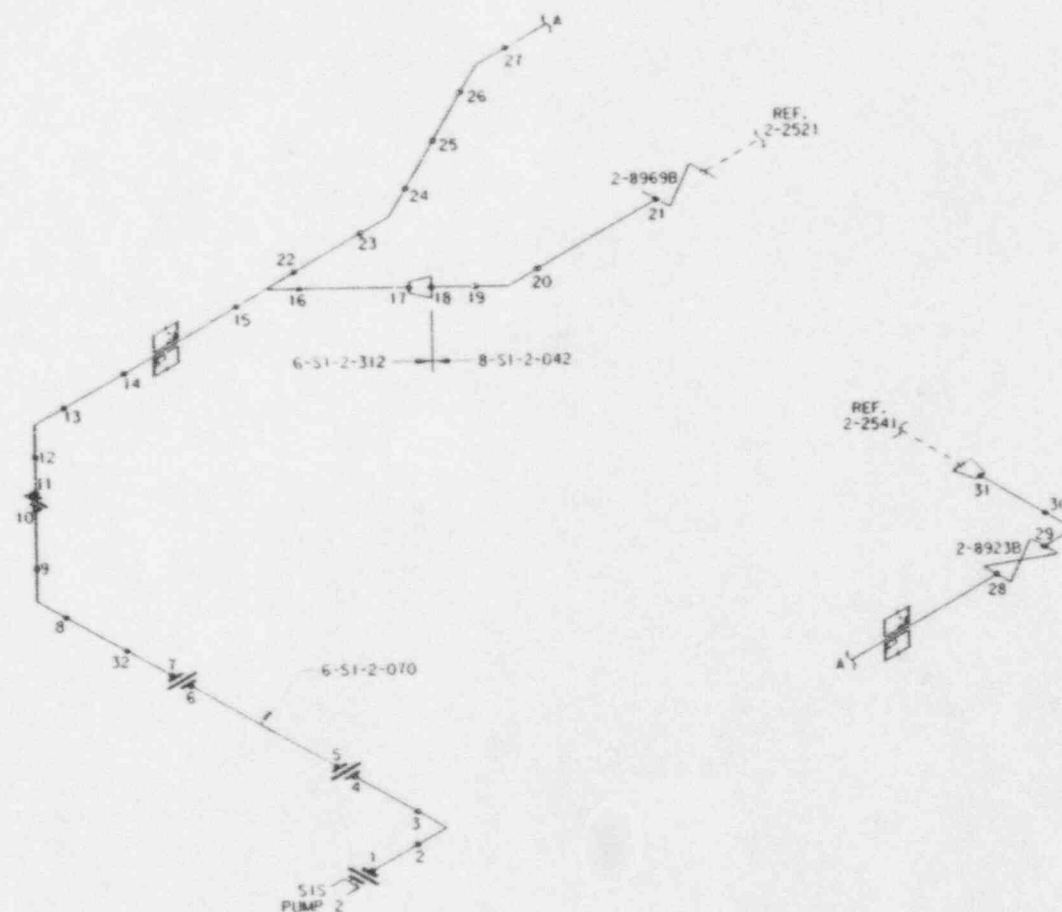
TCX-2-2541

REV. 2

09-0 94

TCX-2-2541, IS1

101/134



ILLUSTRATIVE USE ONLY

NOTES: 6" AND 8" SCH 40 PIPING IS INCLUDED FOR POPULATION ONLY. LONGITUDINAL WELDS:
1L, 2L, 3L, 4L, 7L, 8L, 9L, 10L, 11L, 12L, 13L, 14L, 15L, 16L, 17L, 22L, 23L, 24L, 25L, 26L, 27L, 28L, 30L, 31L

DESCRIPTION: SAFETY INJECTION

T/SCH: (8"), 322"/40, (6"), 280"/40

BRP: SI-2-SB-006, SI-2-SB-010

FLOW: M2-0262, M2-0263

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

TCX-2-2542

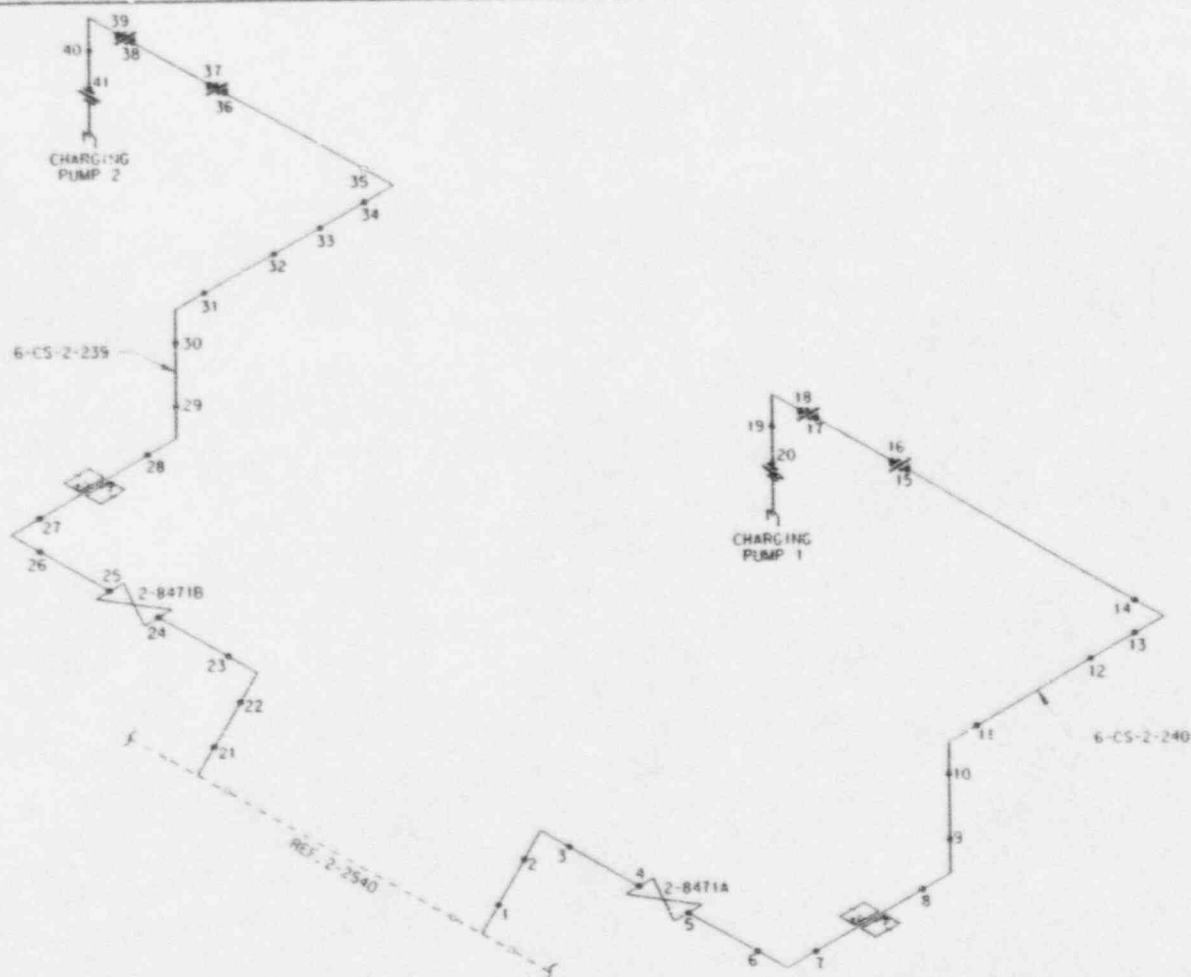
REV. 1

09-01-94

APPROVAL: *RB Mays RB Mays 9-1-94*

TCX225421.ISI

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ILLUSTRATIVE USE ONLY

NOTES: 6" SCH 40 PIPING IS INCLUDED FOR
POPULATION ONLY. LONGITUDINAL WELDS:
1L, 2L, 3L, 4L, 5L, 6L, 22L, 23L

DESCRIPTION: CS CHARGING

T/SCH: (6") .280" / 40

BRP: CS-2-AB-078, CS-2-AB-084, CS-2-AB-085

FLOW: M2-0253

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

TCX-2-2550

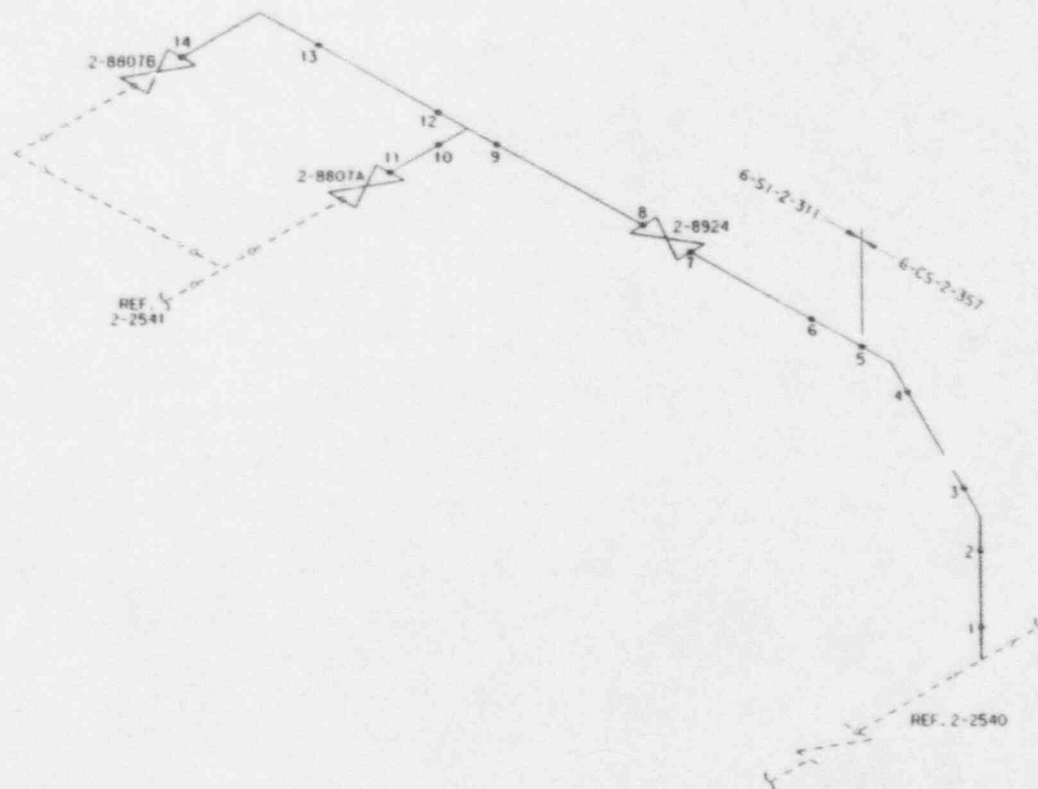
REV. 1

09-01-94

APPROVAL:

RB May 21-94

TCX225501.1S1



ILLUSTRATIVE USE ONLY

NOTES: 6" SCH 40 PIPING IS INCLUDED FOR
POPULATION ONLY. LONGITUDINAL WELDS:
5L, 6L, 7L, 10L, 11L, 12L, 13L

DESCRIPTION: SAFETY INJECTION / CS

T/SCH: (16"), 280"/40

BRP: CS-2-SB-001, SI-2-SB-002

FLOW: M2-0262, M2-0263

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

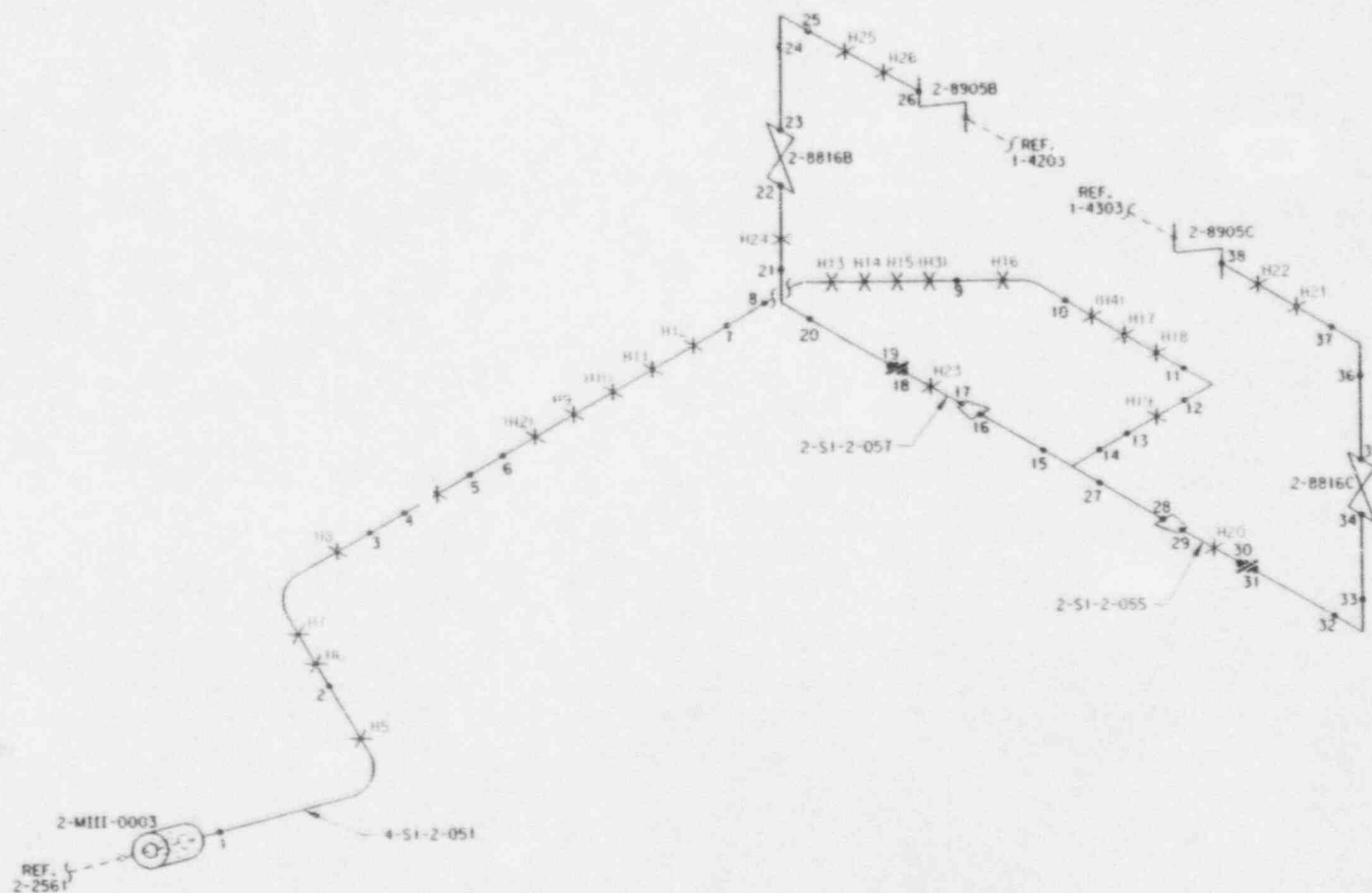
APPROVAL: *RB May AS May 9-1-94*

TCX-2-2551

REV. 1

09-01-94

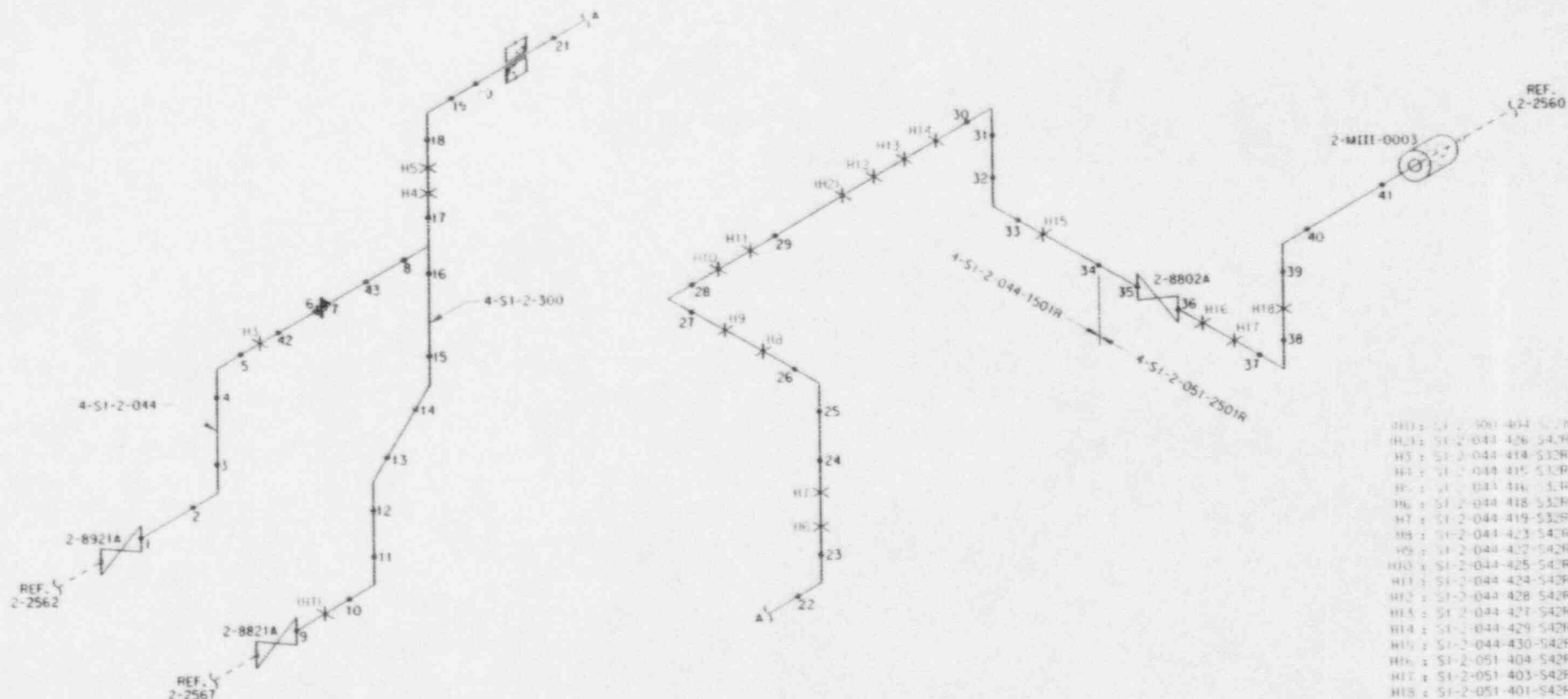
104/134



- H11: S1-2-051-411-421
- H12: S1-2-051-411-421
- H13: S1-2-051-411-421
- H14: S1-2-051-411-421
- H15: S1-2-051-411-421
- H16: S1-2-051-411-421
- H17: S1-2-051-411-421
- H18: S1-2-051-411-421
- H19: S1-2-051-411-421
- H20: S1-2-051-411-421
- H21: S1-2-051-411-421
- H22: S1-2-051-411-421
- H23: S1-2-051-411-421
- H24: S1-2-051-411-421
- H25: S1-2-051-411-421
- H26: S1-2-051-411-421
- H27: S1-2-051-411-421
- H28: S1-2-051-411-421
- H29: S1-2-051-411-421
- H30: S1-2-051-411-421
- H31: S1-2-051-411-421
- H32: S1-2-051-411-421
- H33: S1-2-051-411-421
- H34: S1-2-051-411-421
- H35: S1-2-051-411-421
- H36: S1-2-051-411-421
- H37: S1-2-051-411-421

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: SAFETY INJECTION	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (4")531"/160, (2")343"/160			
	BRP: S1-2-RB-014A, S1-2-RB-014B, S1-2-RB-015	INSERVICE INSPECTION LOCATION ISOMETRIC		
APPROVAL: <i>RB May RB May 8-1-94</i>	FLOW: M2-0262, M2-0263	TCX-2-2560	REV. 3	09-01-94



H1 : SI-2-044-404-S42R
 H2 : SI-2-044-426-S42R
 H3 : SI-2-044-414-S32R
 H4 : SI-2-044-415-S32R
 H5 : SI-2-044-416-S42R
 H6 : SI-2-044-418-S32R
 H7 : SI-2-044-419-S32R
 H8 : SI-2-044-423-S42R
 H9 : SI-2-044-422-S42R
 H10 : SI-2-044-425-S42R
 H11 : SI-2-044-424-S42R
 H12 : SI-2-044-428-S42R
 H13 : SI-2-044-427-S42R
 H14 : SI-2-044-429-S42R
 H15 : SI-2-044-430-S42R
 H16 : SI-2-051-404-S42R
 H17 : SI-2-051-403-S42R
 H18 : SI-2-051-401-S42R

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: SAFETY INJECTION

T/SCH: (4").531"/160, (4").337"/80

BRP: SI-2-SB-013, SI-2-SB-016, SI-2-SB-017,

SI-2-SB-018, SI-2-SB-037, SI-2-SB-078

FLOW: M2-0262, M2-0263

TU ELECTRIC
CPSES UNIT 2INSERVICE INSPECTION
LOCATION ISOMETRIC

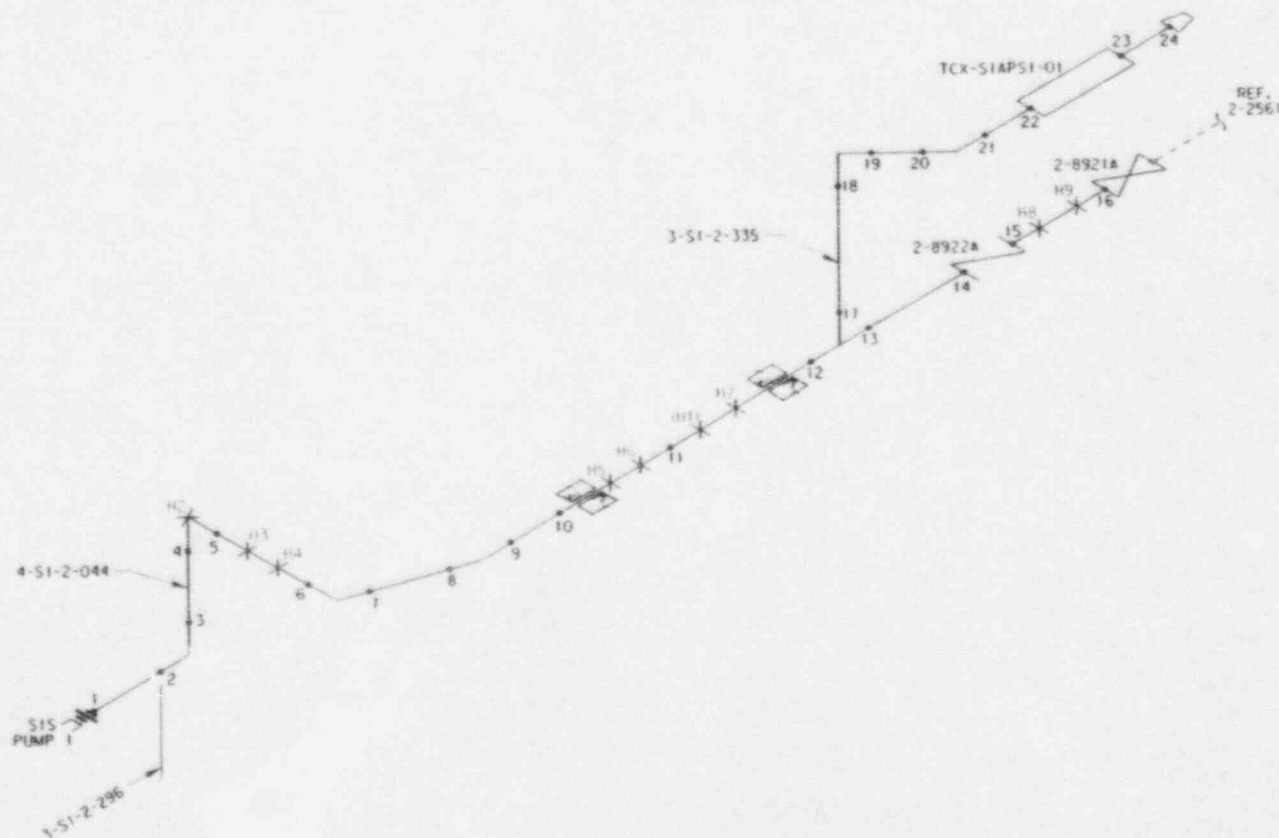
TCX-2-2561

REV. 2

09-01-94

APPROVAL: *RBMays* *BMays* 9-1-94

106/134



H11 : SI-2-044-700-S22R
 H2 : SI-2-044-401-S22R
 H3 : SI-2-044-701-S22R
 H4 : SI-2-044-402-S22R
 H5 : SI-2-044-434-S22R
 H6 : SI-2-044-405-S22R
 H7 : SI-2-044-407-S22R
 H8 : SI-2-044-408-S22R
 H9 : SI-2-044-409-S22R

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: SAFETY INJECTION

T/SCH: (4").337"/80, (3").300"/80

BRP: SI-2-SB-017, SI-2-SB-019

FLOW: M2-0262, M2-0263

TU ELECTRIC
 CPSES UNIT 2

INSERVICE INSPECTION
 LOCATION ISOMETRIC

APPROVAL: *RB Mays* *CB Mays* 9-1-94

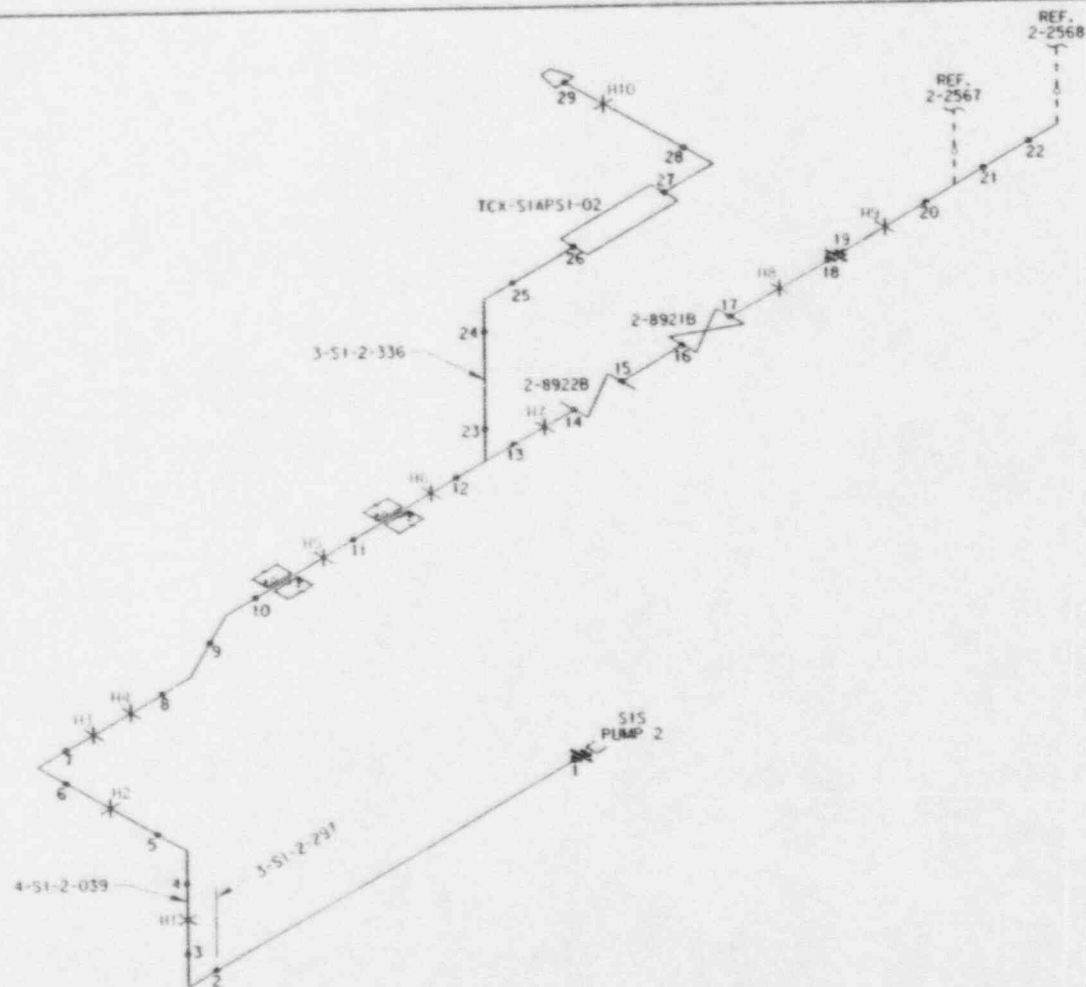
TCX-2-2562

REV. 2

09-01-94

TCX-2-25622,151

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- H1 : SI-2-039-403-020
- H2 : SI-2-039-403-020
- H3 : SI-2-039-403-020
- H4 : SI-2-039-403-020
- H5 : SI-2-039-403-020
- H6 : SI-2-039-403-020
- H7 : SI-2-039-403-020
- H8 : SI-2-039-403-020
- H9 : SI-2-039-403-020
- H10 : SI-2-336-403-020

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: SAFETY INJECTION

T/SCH: (4").337"/80, (3").300"/80

BRP: SI-2-SB-014, SI-2-SB-020

FLOW: M2-0262, M2-0263

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

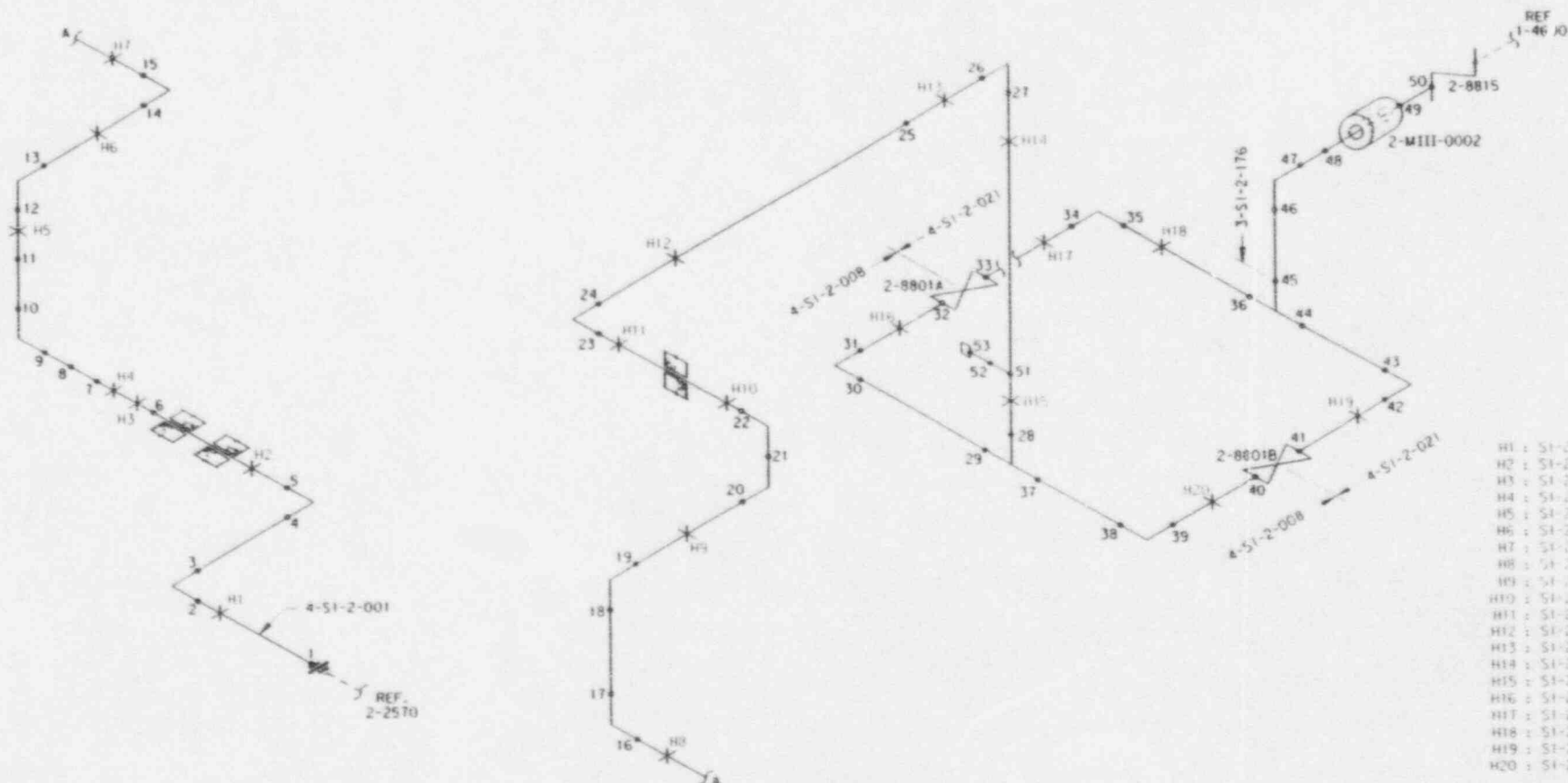
APPROVAL: *RB Mer. JB May 8-1-94*

TCX-2-2563

REV. 1

09-01-94

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- H1 : SI-2-001-409-S42R
- H2 : SI-2-001-705-S42R
- H3 : SI-2-001-406-S42R
- H4 : SI-2-001-405-S42R
- H5 : SI-2-001-700-S42R
- H6 : SI-2-001-701-S42R
- H7 : SI-2-001-702-S42R
- H8 : SI-2-001-703-S42R
- H9 : SI-2-001-704-S42R
- H10 : SI-2-001-427-S42R
- H11 : SI-2-001-426-S42R
- H12 : SI-2-001-425-S42R
- H13 : SI-2-001-424-S42R
- H14 : SI-2-001-423-S42R
- H15 : SI-2-001-422-S42R
- H16 : SI-2-008-401-S42R
- H17 : SI-2-021-404-S42R
- H18 : SI-2-021-405-S42R
- H19 : SI-2-021-402-S42R
- H20 : SI-2-021-403-S42R

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: SAFETY INJECTION

T/SCH: (4") 531"/160, (3") 438"/160

BRP: SI-2-AB-004, SI-2-RB-040, SI-2-SB-073,

SI-2-SB-082, SI-2-SB-087, SI-2-SB-089

FLOW: M2-0262, M2-0263

TU ELECTRIC
CPSES UNIT 2INSERVICE INSPECTION
LOCATION ISOMETRICAPPROVAL: *RBA/ays RBA/ays 9-1-94*

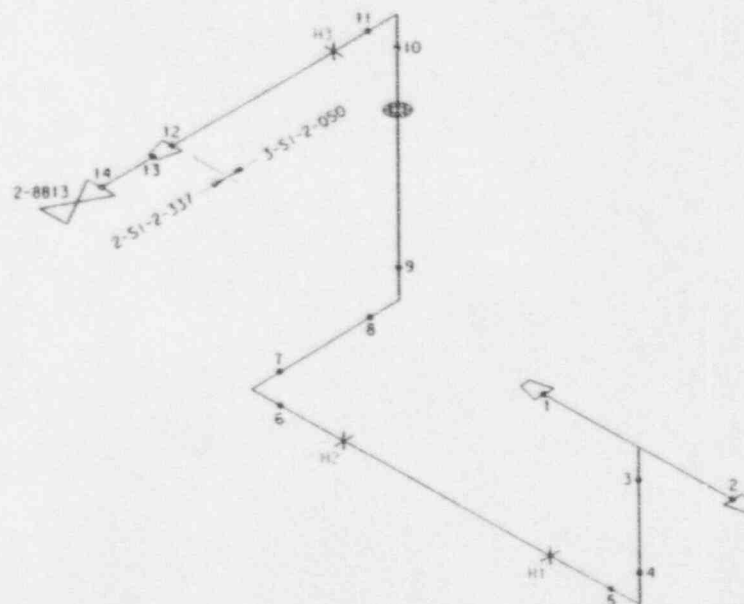
TCX-2-2564

REV. 1

09-01-94

TCX-225641.1S1

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H1 : SI-2-050-402-S32R
H2 : SI-2-050-403-S32R
H3 : SI-2-050-405-S32R

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: SAFETY INJECTION

T/SCH: (3") 300"/80, (2") 218"/80

BRP: SI-2-SB-019, SI-2-SB-021, SI-2-SB-022

FLOW: M2-0262, M2-0263

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB May B May 8-1-94*

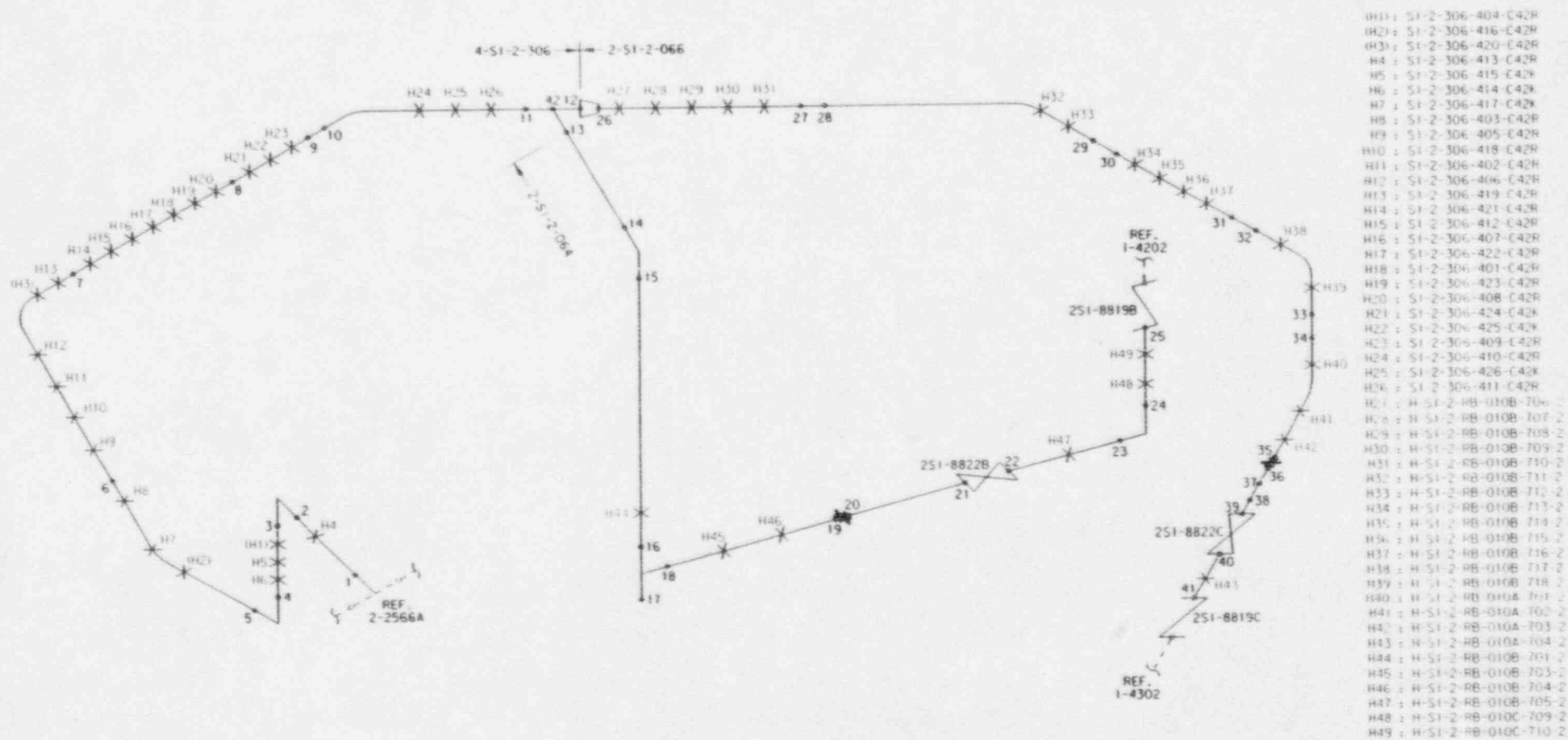
TCX-2-2565

REV. 1

09-01-94

TCX225651, ISI

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NOTES:

DESCRIPTION: SAFETY INJECTION

T/SCH: (4") 531°/160, (2") 343°/160

BRP: SI-2-RB-010A, SI-2-RB-010B, SI-2-RB-010C,
SI-2-RB-011

FLOW: M2-0262, M2-0263

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

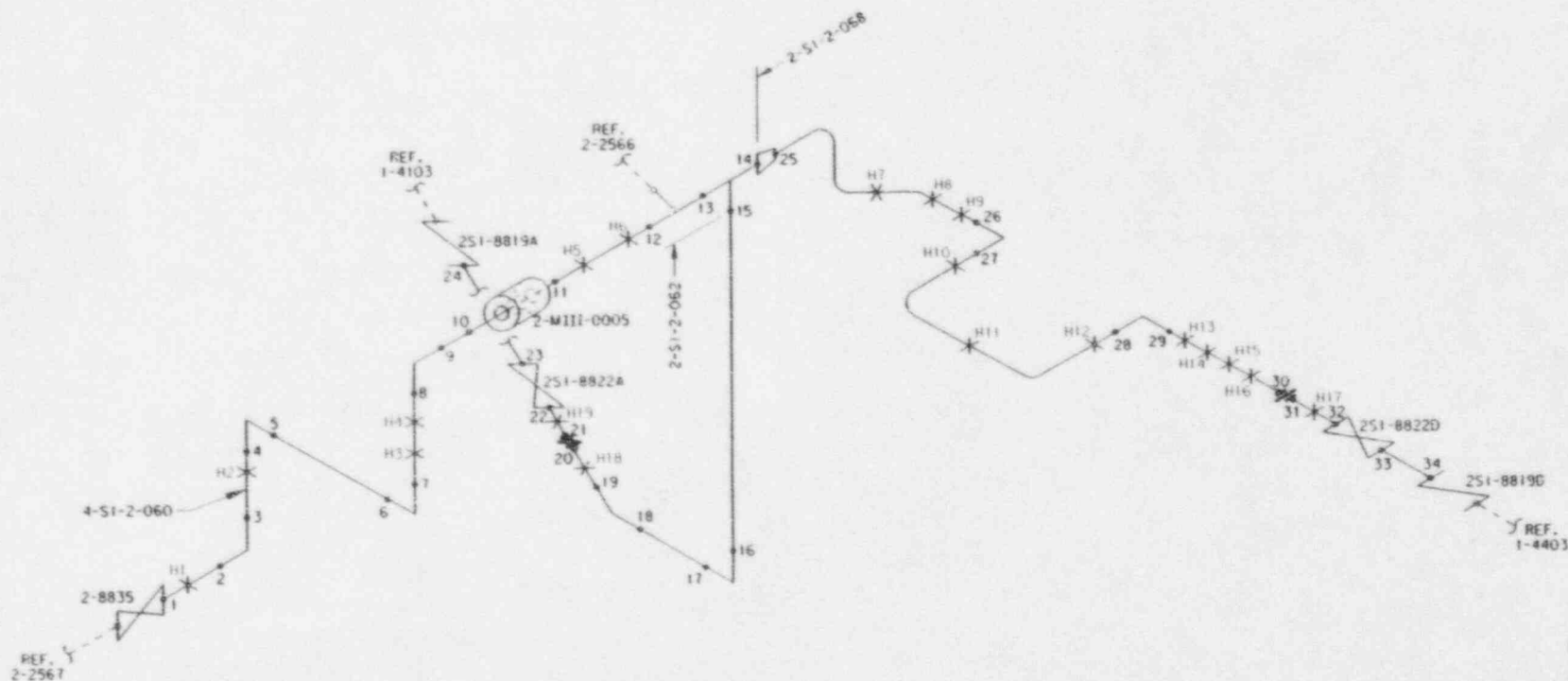
APPROVAL: *FB May RB May 9-1-94*

TCX-2-2566

REV. 2

09-01-94

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- H1 : S1-2-060-401-542F
- H2 : S1-2-060-402-542F
- H3 : S1-2-060-405-542R
- H4 : S1-2-060-406-542S
- H5 : S1-2-060-408-542S
- H6 : S1-2-060-407-542S
- H7 : H-S1-2-RB-058-701
- H8 : H-S1-2-RB-058-702
- H9 : H-S1-2-RB-058-703
- H10 : H-S1-2-RB-058-704
- H11 : H-S1-2-RB-058-705
- H12 : H-S1-2-RB-058-707
- H13 : H-S1-2-RB-058-708
- H14 : H-S1-2-RB-058-709
- H15 : H-S1-2-RB-058-710
- H16 : H-S1-2-RB-058-711
- H17 : H-S1-2-RB-058-712
- H18 : H-S1-2-RB-066-701
- H19 : H-S1-2-RB-066-702

ILLUSTRATIVE USE ONLY

NOTES:

DESCRIPTION: SAFETY INJECTION

T/SCH: (4")531"/160, (2")343"/160

BRP: S1-2-RB-066, S1-2-SB-058, S1-2-SB-072

FLOW: M2-0262, M2-0263

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *FB May 9-1-94*

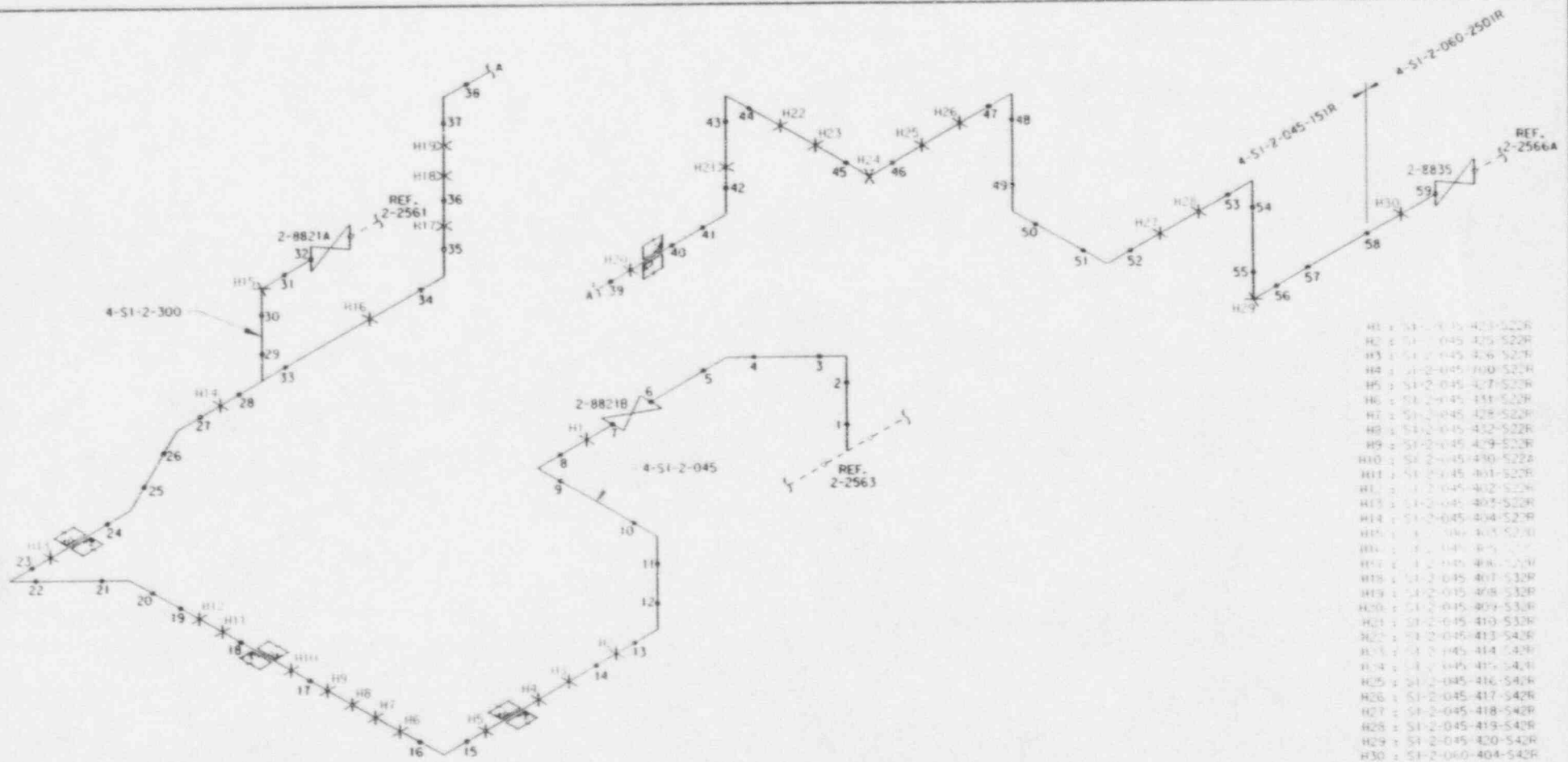
TCX-2-2566A

REV. 1

09-01-94

TCX-2566A1, ISI

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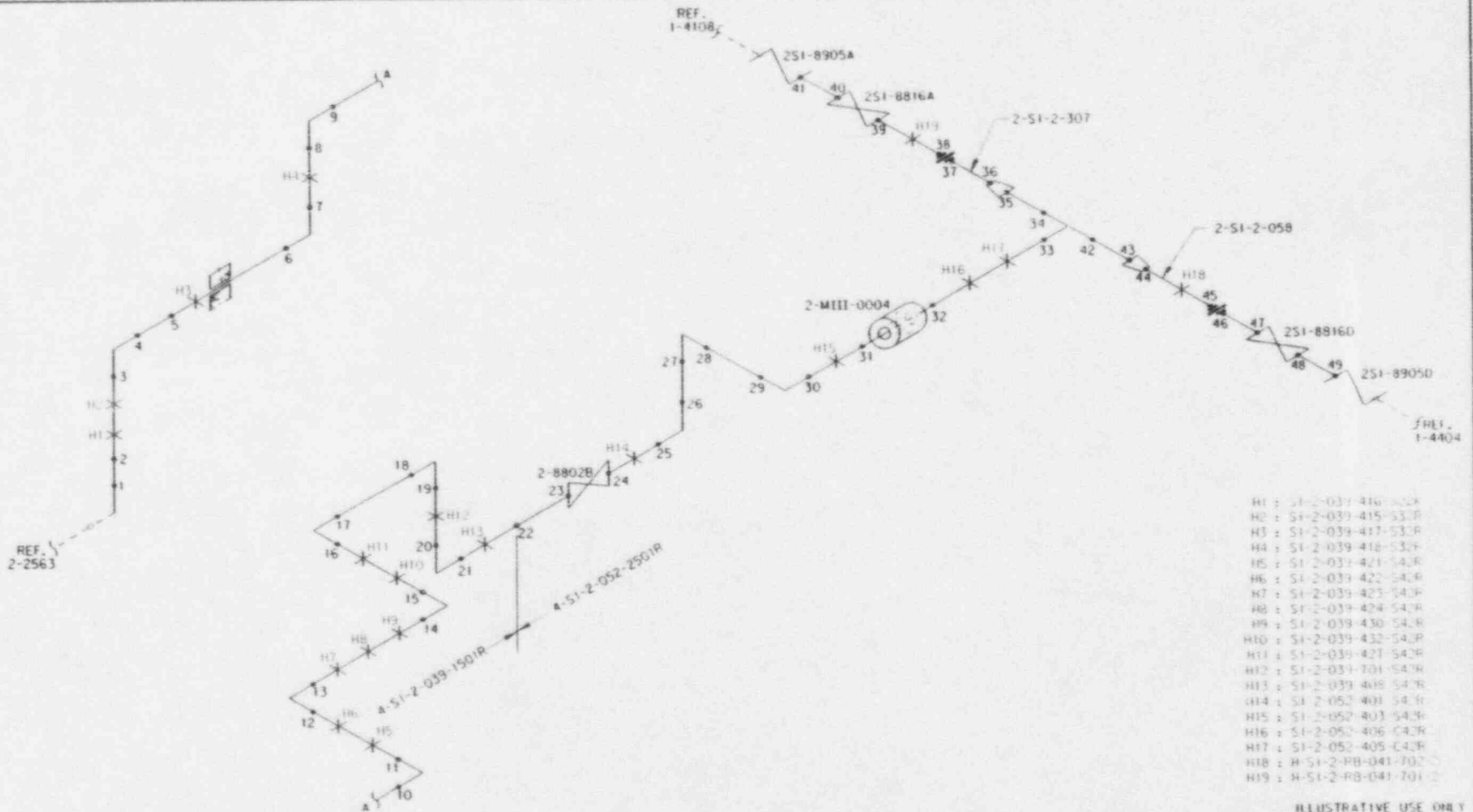


- H1 : SI-2-045-403-S22R
- H2 : SI-2-045-405-S22R
- H3 : SI-2-045-406-S22R
- H4 : SI-2-045-408-S22R
- H5 : SI-2-045-407-S22R
- H6 : SI-2-045-401-S22R
- H7 : SI-2-045-408-S22R
- H8 : SI-2-045-402-S22R
- H9 : SI-2-045-409-S22R
- H10 : SI-2-045-410-S22R
- H11 : SI-2-045-401-S22R
- H12 : SI-2-045-402-S22R
- H13 : SI-2-045-403-S22R
- H14 : SI-2-045-404-S22R
- H15 : SI-2-045-405-S22R
- H16 : SI-2-045-406-S22R
- H17 : SI-2-045-407-S22R
- H18 : SI-2-045-408-S22R
- H19 : SI-2-045-409-S22R
- H20 : SI-2-045-410-S22R
- H21 : SI-2-045-411-S22R
- H22 : SI-2-045-412-S22R
- H23 : SI-2-045-413-S22R
- H24 : SI-2-045-414-S22R
- H25 : SI-2-045-415-S22R
- H26 : SI-2-045-416-S22R
- H27 : SI-2-045-417-S22R
- H28 : SI-2-045-418-S22R
- H29 : SI-2-045-420-S22R
- H30 : SI-2-060-404-S22R

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: SAFETY INJECTION	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (4"), 531"/160, (4"), 337"/80			
	BRP: SI-2-SB-012, SI-2-SB-013, SI-2-SB-015, SI-2-SB-036, SI-2-SB-072	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FLOW: M2-0262, M2-0263			
APPROVAL: <i>RB May 9-1-94</i>		TCX-2-2567	REV. 1	09-01-94

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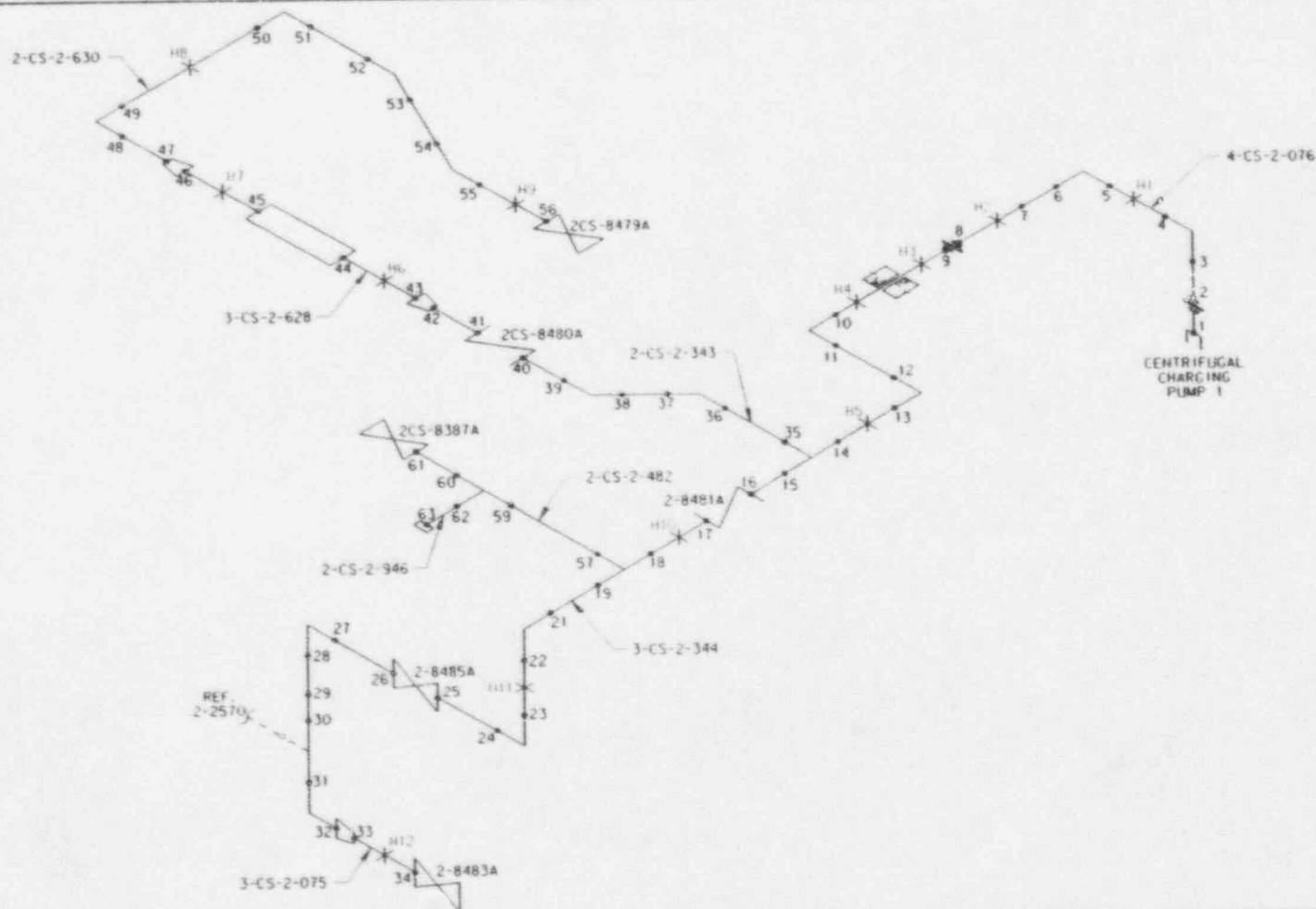


- H1 : SI-2-039-410-S4,R
- H2 : SI-2-039-415-S3,P
- H3 : SI-2-039-417-S3,P
- H4 : SI-2-039-418-S3,P
- H5 : SI-2-039-421-S4,R
- H6 : SI-2-039-422-S4,R
- H7 : SI-2-039-423-S4,P
- H8 : SI-2-039-424-S4,R
- H9 : SI-2-039-430-S4,R
- H10 : SI-2-039-432-S4,P
- H11 : SI-2-039-427-S4,P
- H12 : SI-2-039-701-S4,R
- H13 : SI-2-039-408-S4,R
- H14 : SI-2-052-401-S4,R
- H15 : SI-2-052-403-S4,R
- H16 : SI-2-052-406-C4,R
- H17 : SI-2-052-405-C4,R
- H18 : H-SI-2-RB-041-702
- H19 : H-SI-2-RB-041-701

ILLUSTRATIVE USE ONLY

NOTES:	DESCRIPTION: SAFETY INJECTION	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (4").531"/160, (4").337"/80, (2").343"/160			
	BRP: SI-2-RB-041, SI-2-SB-023, SI-2-SB-045, SI-2-SB-030	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FLOW: M2-0262, M2-0263			
APPROVAL: <i>RB May BS May 9-1-94</i>		TCX-2-2568	REV. 1	09-01-94

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- H1 : CS-2-076-401-A42R
- H2 : CS-2-076-401-A42R
- H3 : CS-2-076-401-A42R
- H4 : CS-2-076-401-A42R
- H5 : CS-2-076-401-A42R
- H6 : CS-2-076-401-A42R
- H7 : CS-2-076-401-A42R
- H8 : H-CS-2-AB-092-004-2
- H9 : H-CS-2-AB-092-005-2
- H10 : CS-2-344-401-A42R
- H11 : CS-2-344-401-A42R
- H12 : CS-2-075-401-A42R

ILLUSTRATIVE USE ONLY

NOTES: WELD NUMBERS 20 AND 58 ARE NOT USED.

DESCRIPTION: CS CHARGING

T/SCH: (4") 531"/160, (3") 438"/160, (2") 343"/160

BRP: CS-2-AB-088, CS-2-AB-092

FLOW: M2-0253

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RBMays BS/Mag 2-1-94*

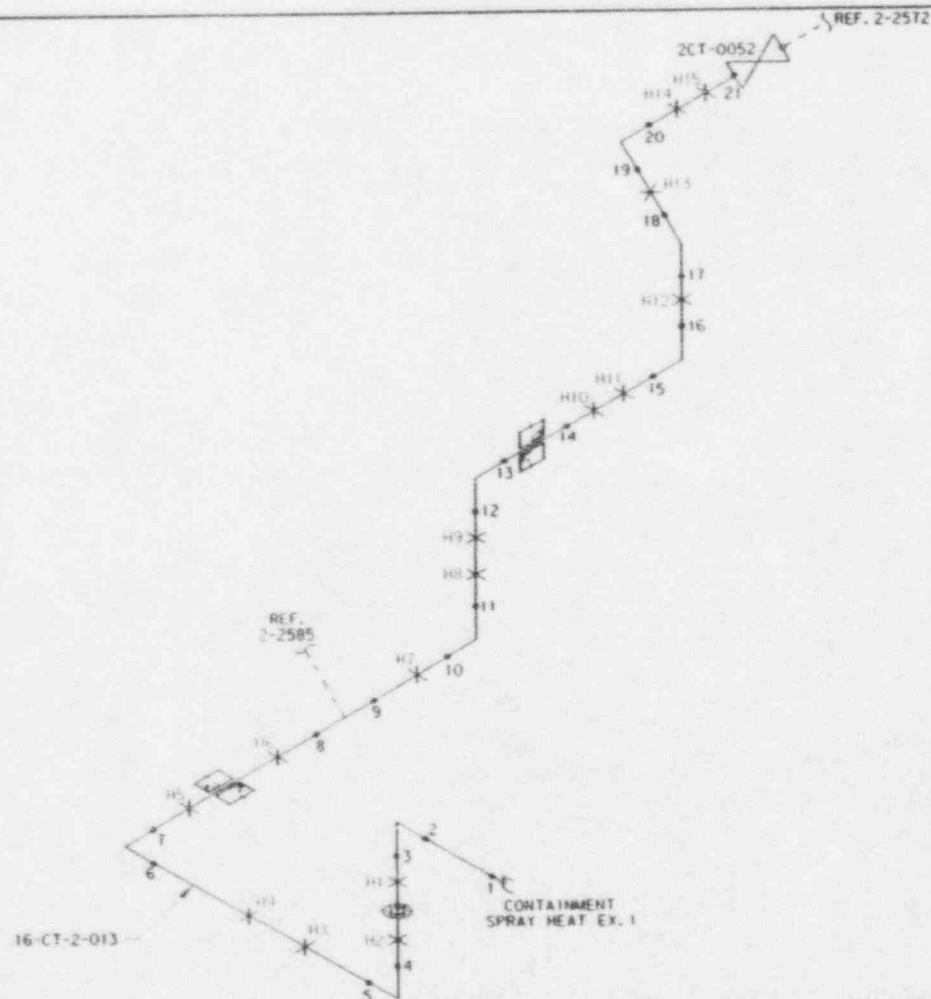
TCX-2-2569

REV. 1

09-01-94

TCX225691.151

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- H1 : CT-2-013-401-S42R
- H2 : CT-2-013-402-S42R
- H3 : CT-2-013-403-S42R
- H4 : CT-2-013-404-S42R
- H5 : CT-2-013-405-S42R
- H6 : CT-2-013-406-S42R
- H7 : CT-2-013-407-S42R
- H8 : CT-2-013-408-S42R
- H9 : CT-2-013-409-S42R
- H10 : CT-2-013-410-S42R
- H11 : CT-2-013-411-S42R
- H12 : CT-2-013-412-S42R
- H13 : CT-2-013-413-S42R
- H14 : CT-2-013-414-S42R
- H15 : CT-2-013-415-S42R

ILLUSTRATIVE USE ONLY

NOTES: LONGITUDINAL WELDS:
1L, 2L, 3L, 4L, 5L, 6L, 7L, 8L, 9L, 10L, 11L, 12L,
13L, 14L, 15L, 16L, 17L, 18L, 19L, 20L, 21L

DESCRIPTION: CONTAINMENT SPRAY

T/SCH: (16"), 375"/MIN. WALL

BRP: CT-2-SB-038, CT-2-SB-041, CT-2-SB-061

FLOW: M2-0232

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB May BS May 9-1-94*

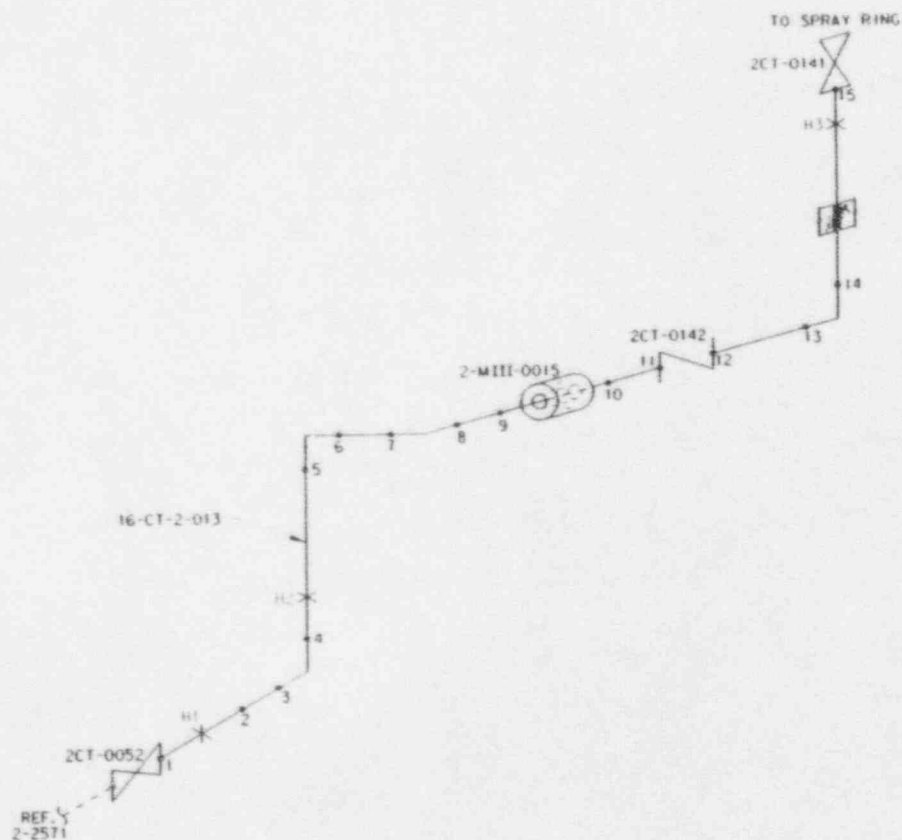
TCX-2-2571

REV. 1

09-01-94

TCX225711.151

117/134



H1 : CT-2-013-423-04R
H2 : CT-2-013-407-54R
H3 : CT-2-013-28-052R

ILLUSTRATIVE USE ONLY

NOTES: LONGITUDINAL WELDS:
1L, 2L, 3L, 4L, 5L, 6L, 7L, 8L, 9L,
10L, 11L, 12L, 13L, 14L, 15L

DESCRIPTION: CONTAINMENT SPRAY

T/SCH: (16"), 375"/MIN. WALL

BRP: CT-2-RB-009, CT-2-SB-061

FLOW: M2-0232

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB May 9-1-94*

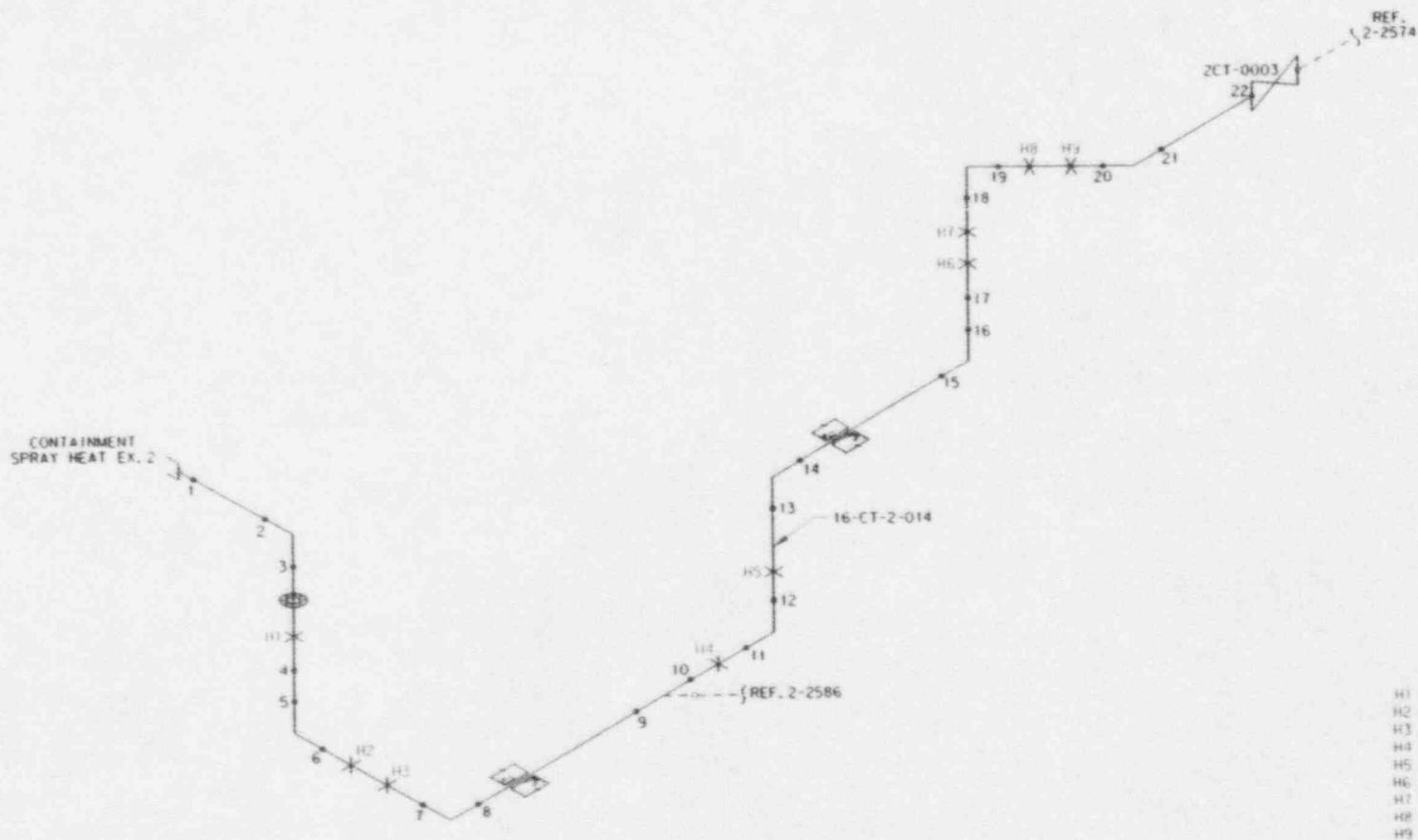
TCX-2-2572

REV. 1

09-01-94

TCX25721.151

118/134



- H1 : CT-2-014-446-S2CR
- H2 : CT-2-014-449-S22S
- H3 : CT-2-014-445-S2CR
- H4 : CT-2-014-447-S2CR
- H5 : CT-2-014-700-S22R
- H6 : CT-2-014-448-S2CR
- H7 : CT-2-014-415-S42R
- H8 : CT-2-014-417-S42R
- H9 : CT-2-014-418-S42R

ILLUSTRATIVE USE ONLY

NOTES: LONGITUDINAL WELDS:
1L, 2L, 3L, 4L, 5L, 6L, 7L, 8L, 9L, 10L, 11L, 12L,
13L, 14L, 15L, 16L, 17L, 18L, 19L, 20L, 21L, 22L

DESCRIPTION: CONTAINMENT SPRAY

T/SCH: (116").375"/MIN. WALL

BRP: CT-2-SB-035, CT-2-SB-036, CT-2-SB-065

FLOW: M2-0232

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

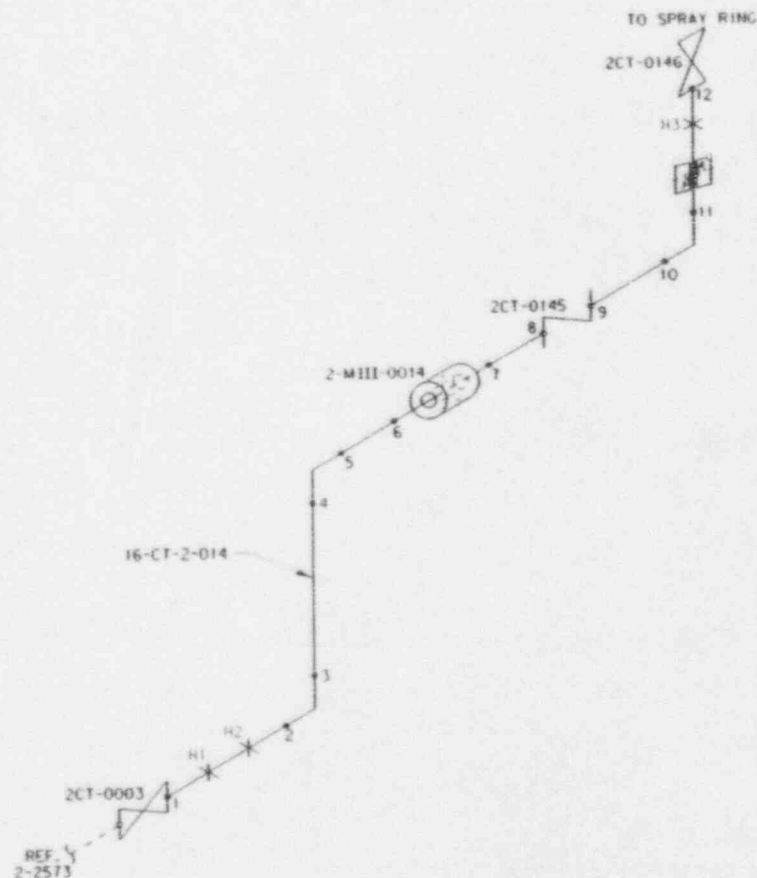
APPROVAL: *RB Mays BB May 9-1-94*

TCX-2-2573

REV. 1

09-01-94

119/34



H1 : CT-2-014-421-543R
H2 : CT-2-014-420-542R
H3 : CT-2-014-436-553R

ILLUSTRATIVE USE ONLY

NOTES: LONGITUDINAL WELDS:
1L, 2L, 3L, 4L, 5L, 6L, 7L, 8L, 9L, 10L, 11L, 12L

DESCRIPTION: CONTAINMENT SPRAY

T/SCH: (16"), 375"/MIN. WALL

BRP: CT-2-RB-009, CT-2-SB-065

FLOW: M2-0232

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB May* *9-1-94*

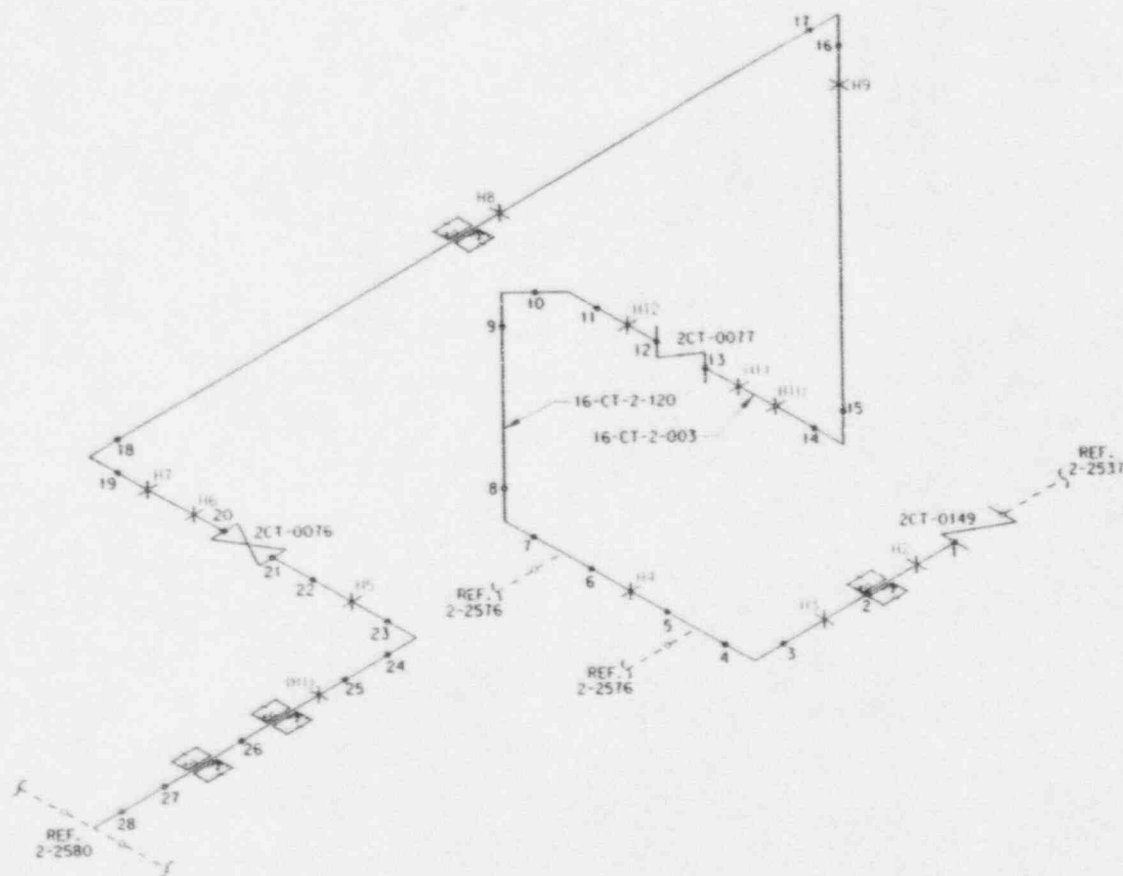
TCX-2-2574

REV. 1

09-01-94

TCX225741.1SI

120/134



- H8 : CT-2-003-401-532R
- H9 : CT-2-120-404-522R
- H10 : CT-2-120-403-522R
- H11 : CT-2-120-700-522R
- H12 : CT-2-003-402-532R
- H13 : CT-2-003-403-532R
- H14 : CT-2-003-404-532R
- H15 : CT-2-003-405-532R
- H16 : CT-2-003-406-532R
- H17 : CT-2-003-407-532R
- H18 : CT-2-003-408-532R
- H19 : CT-2-120-401-532S

ILLUSTRATIVE USE ONLY

NOTES: LONGITUDINAL WELDS:
1L, 2L, 3L, 5L, 6L, 8L, 9L, 11L, 12L, 13L, 14L, 15L, 16L,
17L, 18L, 19L, 20L, 21L, 22L, 23L, 24L, 25L, 26L, 27L

DESCRIPTION: CONTAINMENT SPRAY

T/SCH: (16") 3.75"/MIN. WALL

BRP: CT-2-SB-029, CT-2-SB-032

FLOW: M2-0232

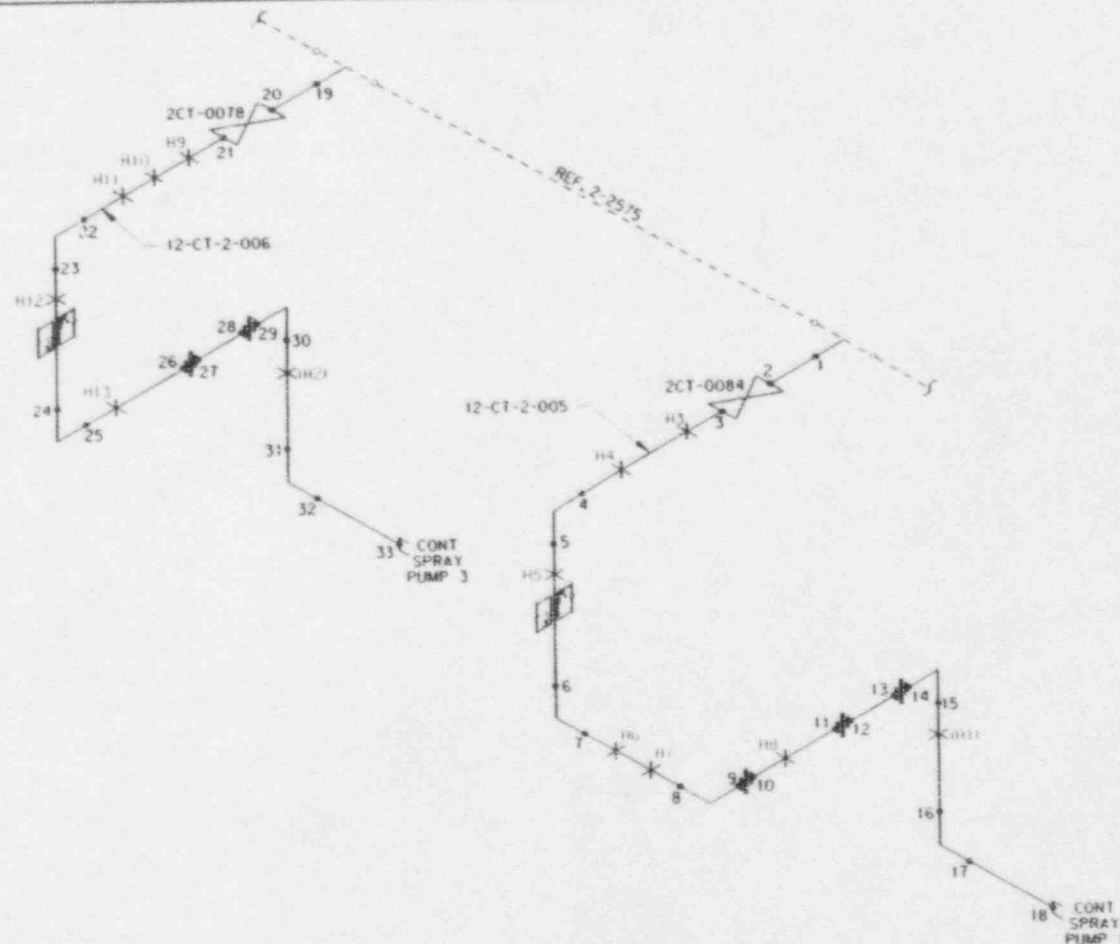
TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB May, BS May 9-1-94*

TCX-2-2575 REV. 2 09-01-94

121/134



- H11: CT-2-005-401-S225
- H12: CT-2-006-401-S225
- H13: CT-2-005-401-S225
- H14: CT-2-005-401-S225
- H15: CT-2-005-401-S225
- H16: CT-2-005-401-S225
- H17: CT-2-005-401-S225
- H18: CT-2-005-401-S225
- H19: CT-2-006-401-S225
- H20: CT-2-006-700-S225
- H21: CT-2-006-402-S225
- H22: CT-2-006-404-S225
- H23: CT-2-006-405-S225

ILLUSTRATIVE USE ONLY

NOTES: LONGITUDINAL WELDS:
1L, 2L, 3L, 4L, 5L, 6L, 7L, 8L, 10L, 11L, 15L, 16L, 17L, 18L,
19L, 20L, 21L, 22L, 23L, 24L, 25L, 26L, 30L, 31L, 32L, 33L

DESCRIPTION: CONTAINMENT SPRAY

T/SCH: (12") .406"/40

BRP: CT-2-SB-002, CT-2-SB-005, CT-2-SB-029

FLOW: M2-0232

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB May, JSS May 9-1-94*

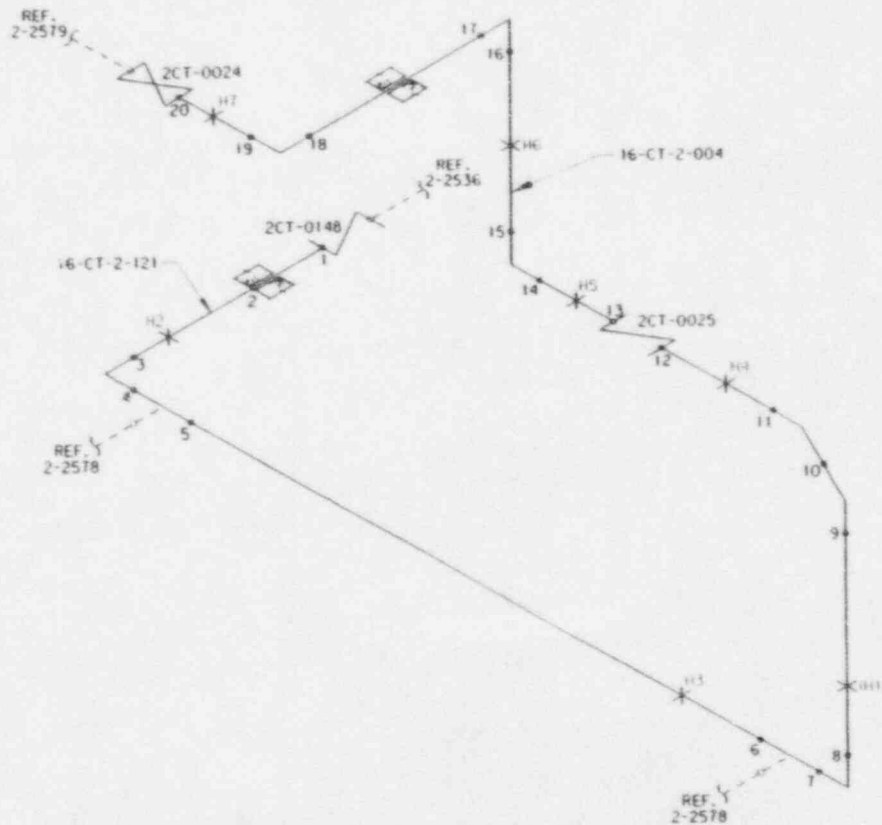
TCX-2-2576

REV. 2

09-01-94

TCX225762,151

122/134

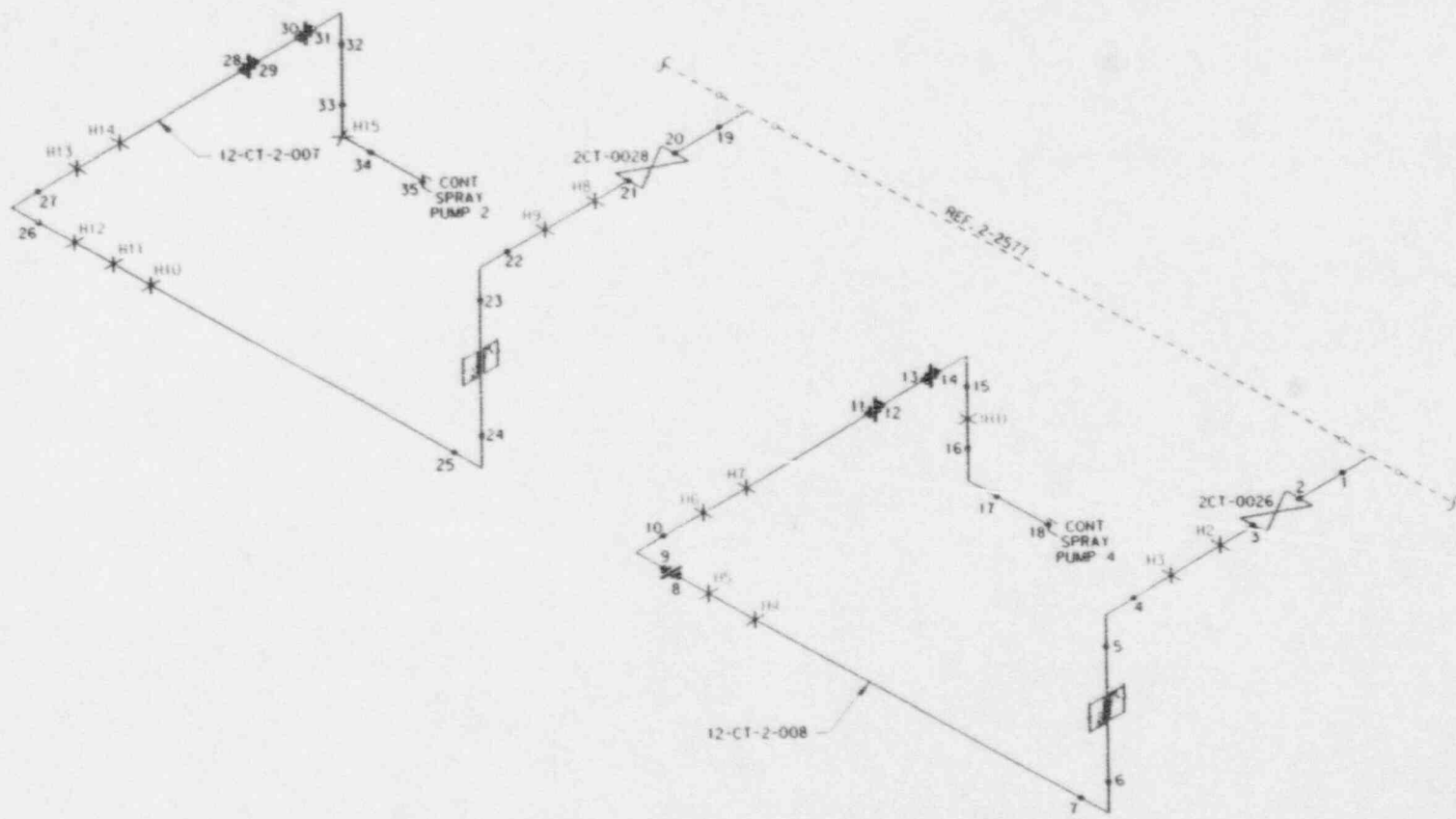


H1 : CT-2-121-403-S225
H2 : CT-2-121-404-S225
H3 : CT-2-121-401-S225
H4 : CT-2-121-200-S325
H5 : CT-2-004-401-S325
H6 : CT-2-004-402-S325
H7 : CT-2-004-404-S325

ILLUSTRATIVE USE ONLY

NOTES: LONGITUDINAL WELDS: 11L, 12L, 13L, 14L, 15L, 16L, 18L, 20L	DESCRIPTION: CONTAINMENT SPRAY	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (16"), 375"/STD. WALL			
	BRP: CT-2-SB-025, CT-2-SB-033	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FLOW: M2-0232			
APPROVAL: <i>RB May 91-94</i>		TCX-2-2577	REV. 2	09-01-94

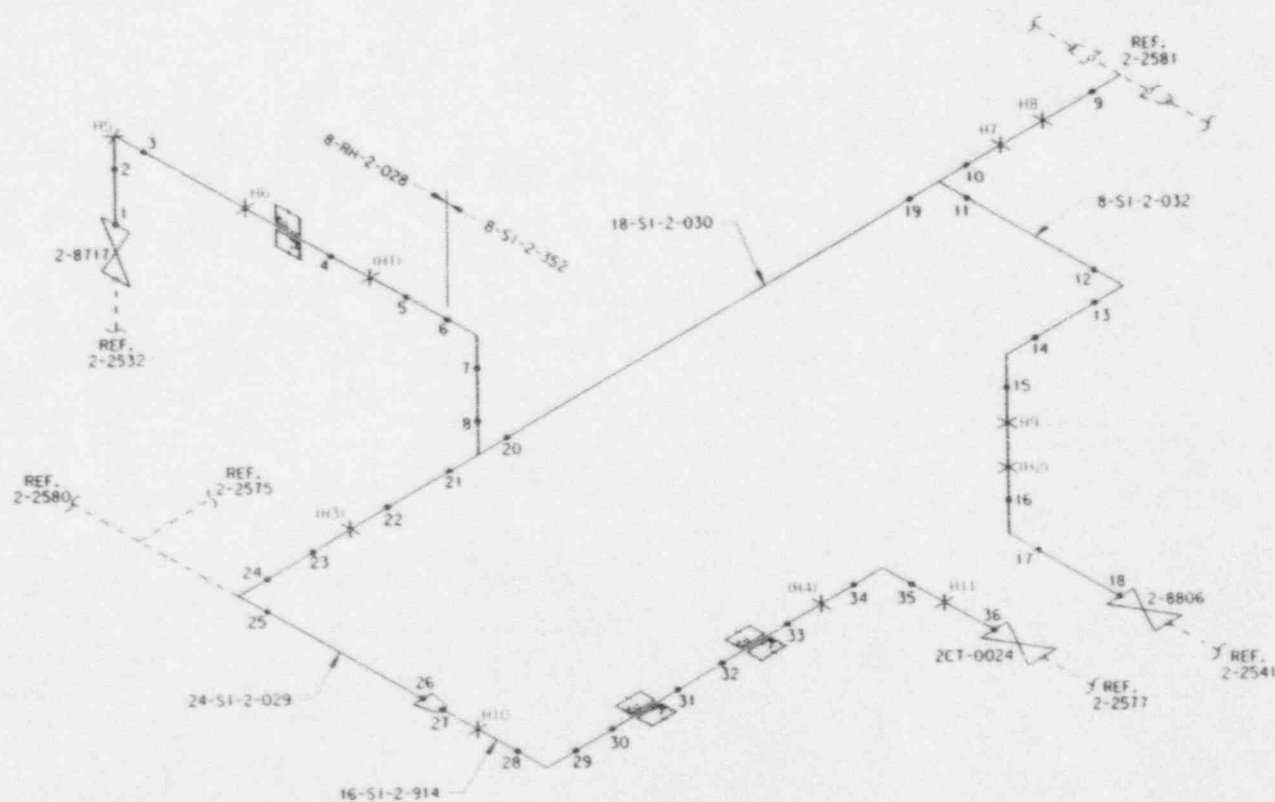
123/134



- H13 : CT-2-008-401-S225
- H14 : CT-2-008-408-S225
- H15 : CT-2-008-407-S22R
- H16 : CT-2-005-406-S22R
- H17 : CT-2-008-405-S22R
- H18 : CT-2-008-402-S225
- H19 : CT-2-008-404-S22R
- H20 : CT-2-007-403-S22R
- H21 : CT-2-007-402-S22R
- H22 : CT-2-007-405-S22R
- H23 : CT-2-007-404-S22R
- H24 : CT-2-007-406-S22R
- H25 : CT-2-007-407-S225
- H26 : CT-2-007-408-S22R
- H27 : CT-2-007-410-S225

ILLUSTRATIVE USE ONLY

NOTES: LONGITUDINAL WELDS: 1L, 2L, 3L, 4L, 5L, 6L, 7L, 8L, 10L, 11L, 15L, 16L, 17L, 18L, 19L, 20L, 21L, 22L, 23L, 24L, 25L, 26L, 27L, 28L, 32L, 33L, 34L, 35L	DESCRIPTION: CONTAINMENT SPRAY		TU ELECTRIC CPSES UNIT 2		
	T/SCH: (12"), 406"/40				
	BRP: CT-2-SB-011, CT-2-SB-016, CT-2-SB-025		INSERVICE INSPECTION LOCATION ISOMETRIC		
APPROVAL: RB May AB May 9-1-94	FLOW: M2-0232		TCX-2-2578	REV. 2	09-01-94



H11: RH-2-028-402-S32R
 H12: SI-2-012-402-S32R
 H13: SI-2-030-402-S32R
 H14: SI-2-914-402-S32R
 H15: RH-2-028-404-S32R
 H16: RH-2-030-404-S32R
 H17: SI-2-030-401-S32R
 H18: SI-2-030-403-S32R
 H19: SI-2-032-401-S32R
 H20: SI-2-914-401-S32R
 H21: SI-2-914-401-S32R

ILLUSTRATIVE USE ONLY

NOTES: LONGITUDINAL WELDS:
 9L, 10L, 11L, 12L, 13L, 14L, 15L, 16L, 17, 18L, 19L, 20L, 21L,
 22L, 23L, 24L, 27L, 28L, 29L, 30L, 31L, 32L, 33L, 34L, 35L, 36L

DESCRIPTION: SAFETY INJECTION/RHR

T/SCH: (24").375"/STD. WALL, (18").375"/STD. WALL,
 (16").375"/STD. WALL, (8").322"/40

BRP: CT-2-SB-033, RH-2-SB-030, RH-2-SB-043,
 SI-2-SB-011, SI-2-SB-035

FLOW: M2-0260, M2-0262, M2-0263

TU ELECTRIC
 CPSES UNIT 2

INSERVICE INSPECTION
 LOCATION ISOMETRIC

APPROVAL:

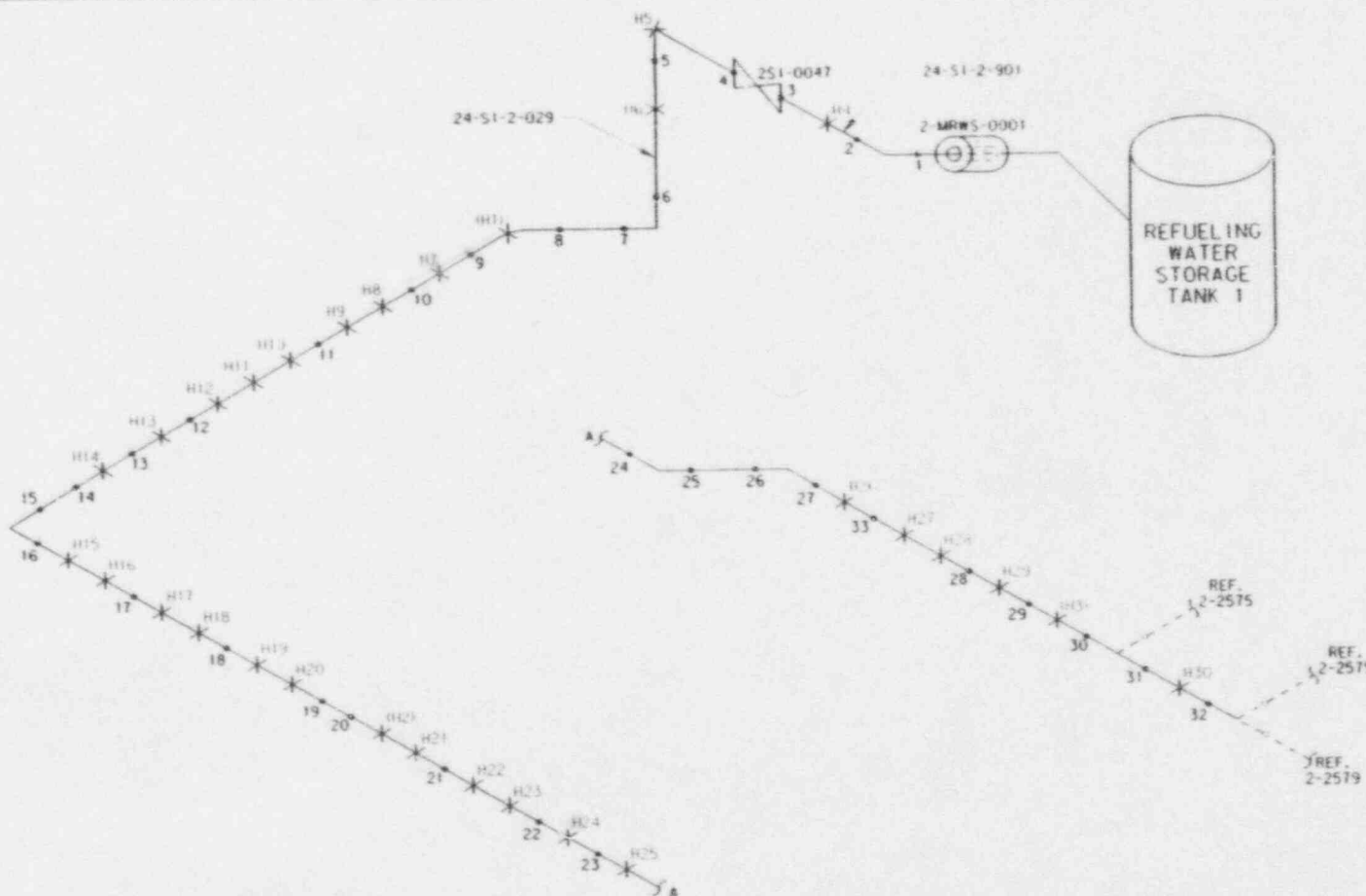
RB May AS May 9-1-94

TCX-2-2579

REV. 2

09-01-94

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- H11 : SI-2-029-415-132R
- H12 : SI-2-029-424-132R
- H13 : SI-2-029-405-132R
- H14 : SI-2-901-403-142R
- H15 : SI-2-029-413-142R
- H16 : SI-2-029-414-131R
- H17 : SI-2-029-401-131R
- H18 : SI-2-029-416-132R
- H19 : SI-2-029-402-132R
- H20 : SI-2-029-400-132R
- H21 : SI-2-029-417-132R
- H22 : SI-2-029-403-132R
- H23 : SI-2-029-418-132R
- H24 : SI-2-029-404-132R
- H25 : SI-2-029-421-132R
- H26 : SI-2-029-405-132R
- H27 : SI-2-029-422-132R
- H28 : SI-2-029-406-132R
- H29 : SI-2-029-423-132R
- H30 : SI-2-029-407-132R
- H31 : SI-2-029-425-132R
- H32 : SI-2-029-408-132R
- H33 : SI-2-029-416-132R
- H34 : SI-2-029-427-132R
- H35 : SI-2-029-428-132R
- H36 : SI-2-029-429-132R
- H37 : SI-2-029-430-132R
- H38 : SI-2-029-431-132R

ILLUSTRATIVE USE ONLY

NOTES: LONGITUDINAL WELDS:
3L, 4L, 6L, 7L, 8L, 9L, 10L, 11L, 12L, 13L, 14L, 15L, 16L, 17L,
18L, 19L, 20L, 21L, 22L, 23L, 24L, 25L, 28L, 29L, 30L, 31L, 32L

DESCRIPTION: SAFETY INJECTION

T/SCH: 124", 375" STD. WALL

BRP: SI-2-SB-035, SI-2-YD-002

FLOW: M2-0262, M2-0263

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

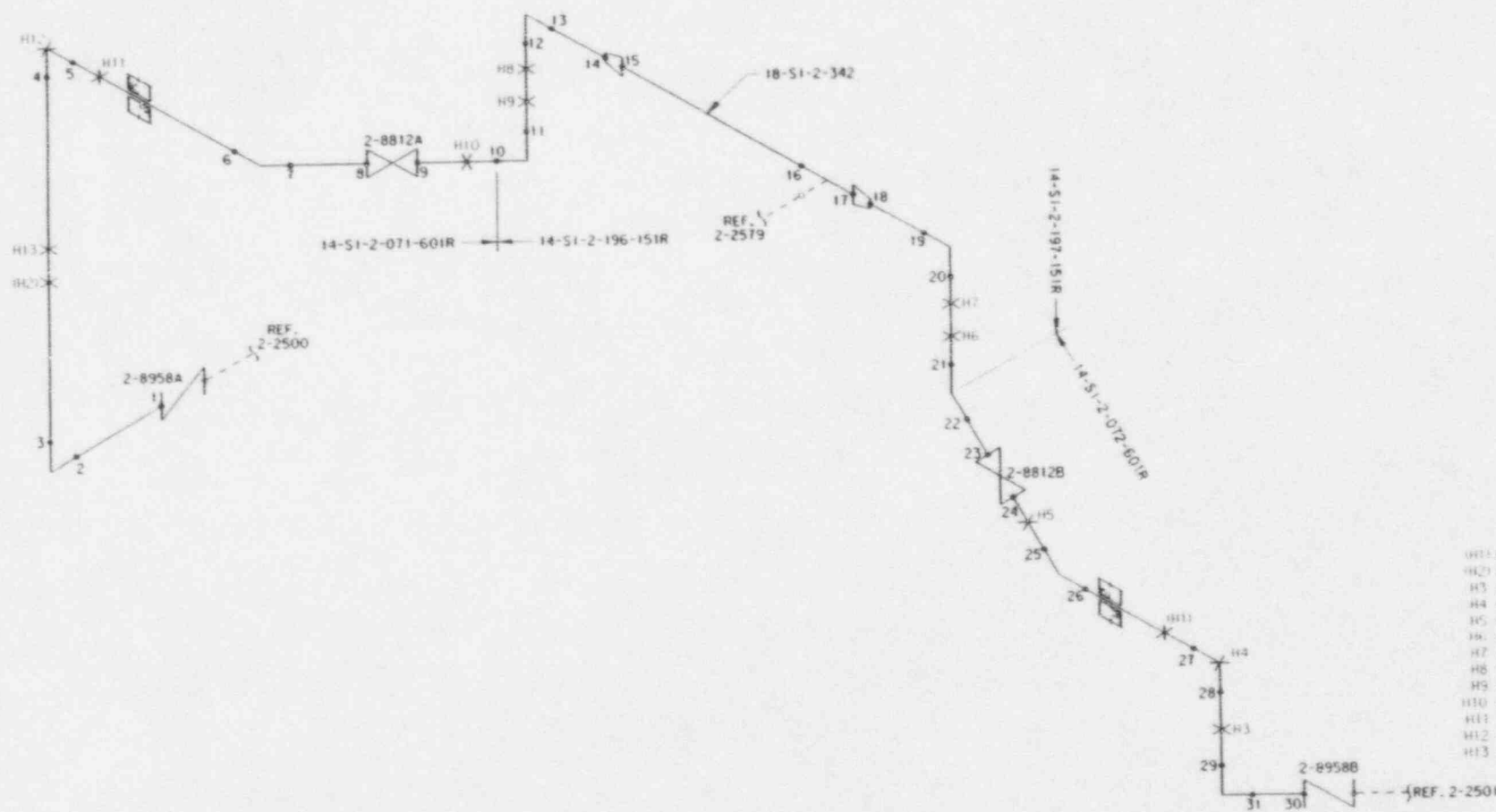
APPROVAL: *RB May* *AB May* 2-1-94

TCX-2-2580

REV. 2

09-01-94

126/134

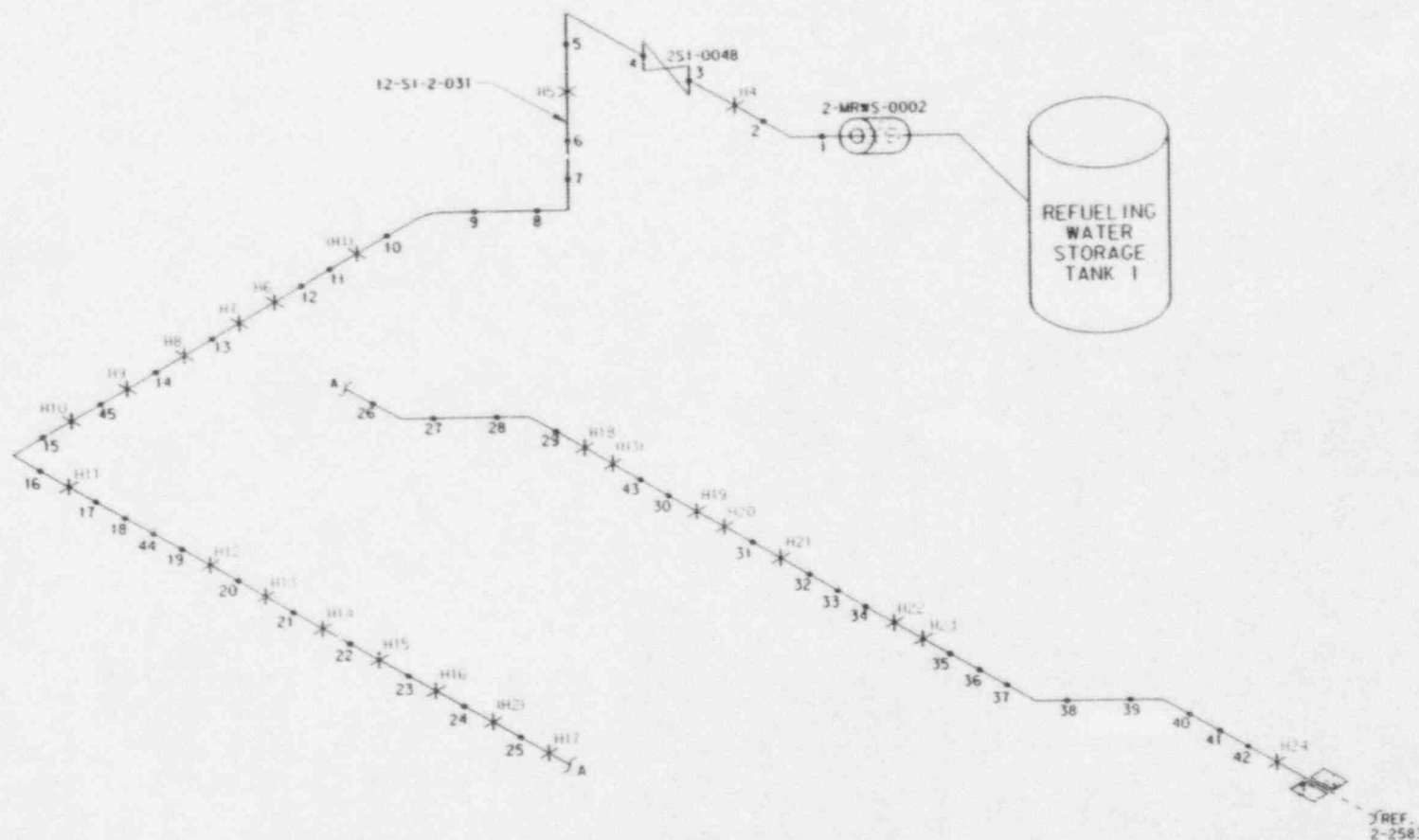


- H11 : SI-2-072-401-S32R
- H12 : SI-2-071-405-S32R
- H3 : SI-2-072-405-S32R
- H4 : SI-2-072-403-S32S
- H5 : SI-2-072-402-S32R
- H6 : SI-2-197-402-S32R
- H7 : SI-2-197-401-S32R
- H8 : SI-2-196-401-S32R
- H9 : SI-2-196-402-S32R
- H10 : SI-2-196-403-S32R
- H11 : SI-2-071-402-S32R
- H12 : SI-2-071-403-S32S
- H13 : SI-2-071-404-S32R

ILLUSTRATIVE USE ONLY

NOTES: LONGITUDINAL WELDS: 6L, 7L, 10L, 11L, 13L, 14L, 15L, 16L, 18L, 19L, 22L, 23L	DESCRIPTION: SAFETY INJECTION	TU ELECTRIC CPSES UNIT 2		
	T/SCH: (18"), 375"/STD. WALL, (14"), 500"/MIN. WALL, (14"), 375"/STD. WALL			
	BRP: SI-2-SB-005, SI-2-SB-025, SI-2-SB-043	INSERVICE INSPECTION LOCATION ISOMETRIC		
	FLOW: M2-0262, M2-0263			
APPROVAL: <i>RB Mays RB Mays 9-1-94</i> TCX-25812.151		TCX-2-2581	REV. 2	09-01-94

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H12 : SI-2-031-425-Y32R
 H13 : SI-2-031-429-Y32R
 H14 : SI-2-031-430-Y32R
 H15 : SI-2-031-431-Y32R
 H16 : SI-2-031-432-Y32R
 H17 : SI-2-031-433-Y32R
 H18 : SI-2-031-434-Y32R
 H19 : SI-2-031-435-Y32R
 H20 : SI-2-031-436-Y32R
 H21 : SI-2-031-437-Y32R
 H22 : SI-2-031-438-Y32R
 H23 : SI-2-031-439-Y32R
 H24 : SI-2-031-440-Y32R

ILLUSTRATIVE USE ONLY

NOTES: LONGITUDINAL WELDS:

2L, 3L, 4L, 6L, 7L, 8L, 9L, 10L, 11L, 12L, 13L, 14L, 15L, 16L, 17L, 18L, 19L, 20L, 21L, 22L, 23L, 24L, 25L, 26L, 27L, 28L, 29L, 30L, 31L, 32L, 33L, 34L, 35L, 36L, 37L, 39L, 40L, 41L, 42L

DESCRIPTION: SAFETY INJECTION

T/SCH: (12"), 406"/40, (12"), 375"/STD. WALL

BRP: SI-2-AB-003, SI-2-SB-048, SI-2-SB-055,

SI-2-YD-003

FLOW: M2-0262, M2-0263

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL:

RB May 8-1-94

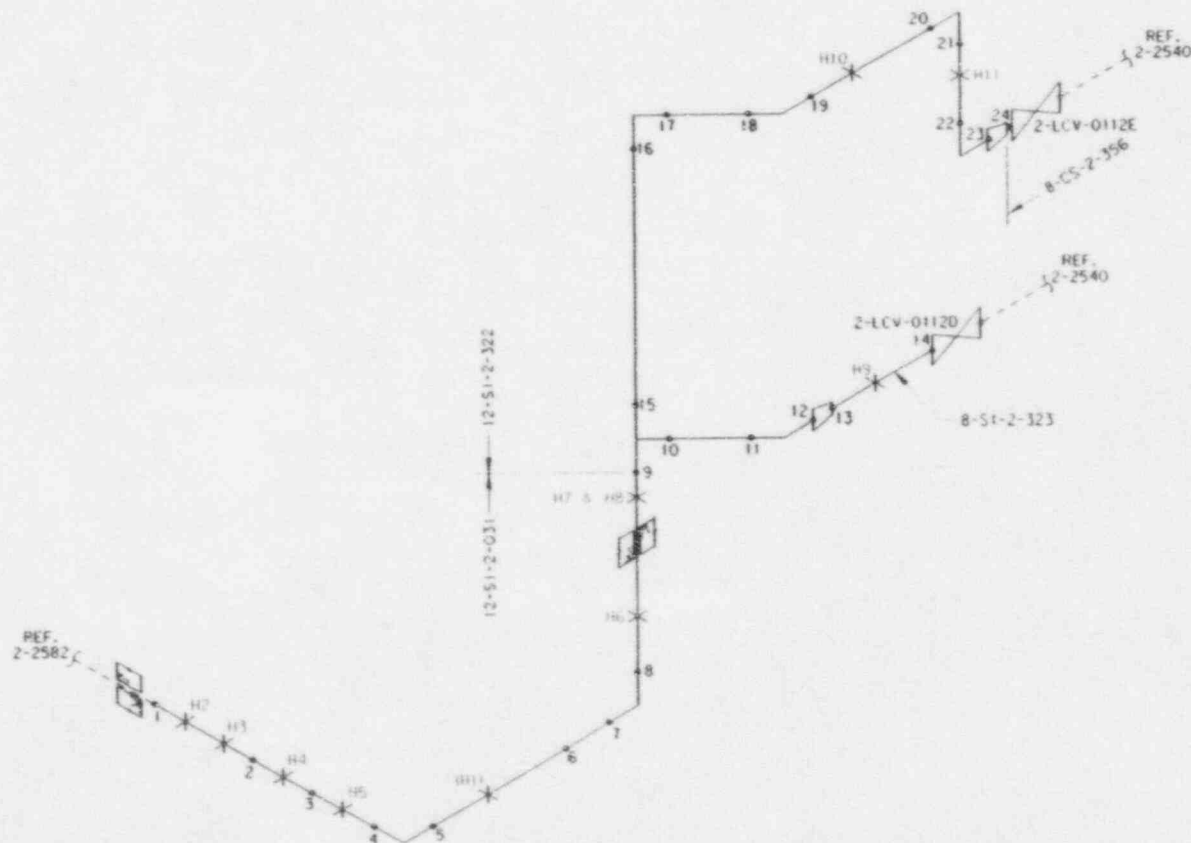
TCX-2-2582

REV. 2

09-01-94

TCX005822.151

128/134



- H01 : SI-2-031-433-A32R
- H02 : SI-2-031-433-A32R
- H03 : SI-2-031-443-A32R
- H04 : SI-2-031-436-A32R
- H05 : SI-2-031-442-A32R
- H06 : SI-2-031-435-A32R
- H07 : SI-2-031-437-A42R
- H08 : SI-2-031-441-A42R
- H09 : SI-2-323-401-A42R
- H10 : SI-2-322-401-A42R
- H11 : SI-2-322-400-A42R

ILLUSTRATIVE USE ONLY

NOTES: LONGITUDINAL WELDS:
1L, 2L, 3L, 4L, 5L, 6L, 10L, 11L, 15L,
16L, 17L, 18L, 19L, 20L, 21L, 22L

DESCRIPTION: SAFETY INJECTION
T/SCH: (12").406"/40, (8").322"/40

BRP: SI-2-AB-002, SI-2-AB-003

FLOW: M2-0262, M2-0263

TU ELECTRIC
CPSES UNIT 2

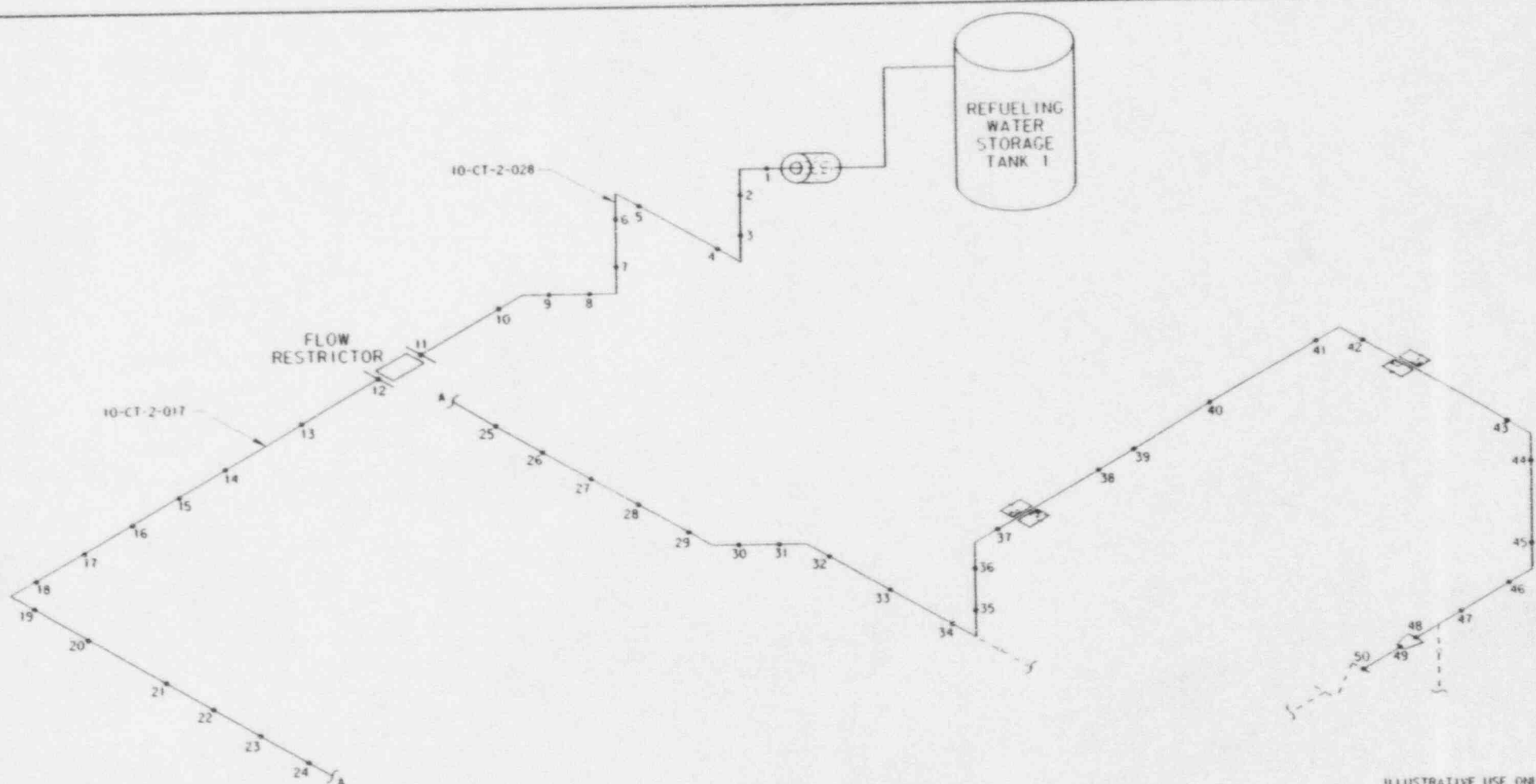
INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB May BS May 9-1-94*

TCX-2-2583 REV. 2 09-01-94

TCX-2-5832-151

129/134



ILLUSTRATIVE USE ONLY

NOTES: 6" AND 10" SCH 40 PIPING IS INCLUDED FOR POPULATION ONLY.

DESCRIPTION: CONTAINMENT SPRAY

T/SCH: (10"), 365"/40, (6"), 280"/40

BRP: CT-2-SB-023, CT-2-SB-053, CT-2-YD-001

FLOW: M2-0232

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL:

RB May 8 May 8-1-94

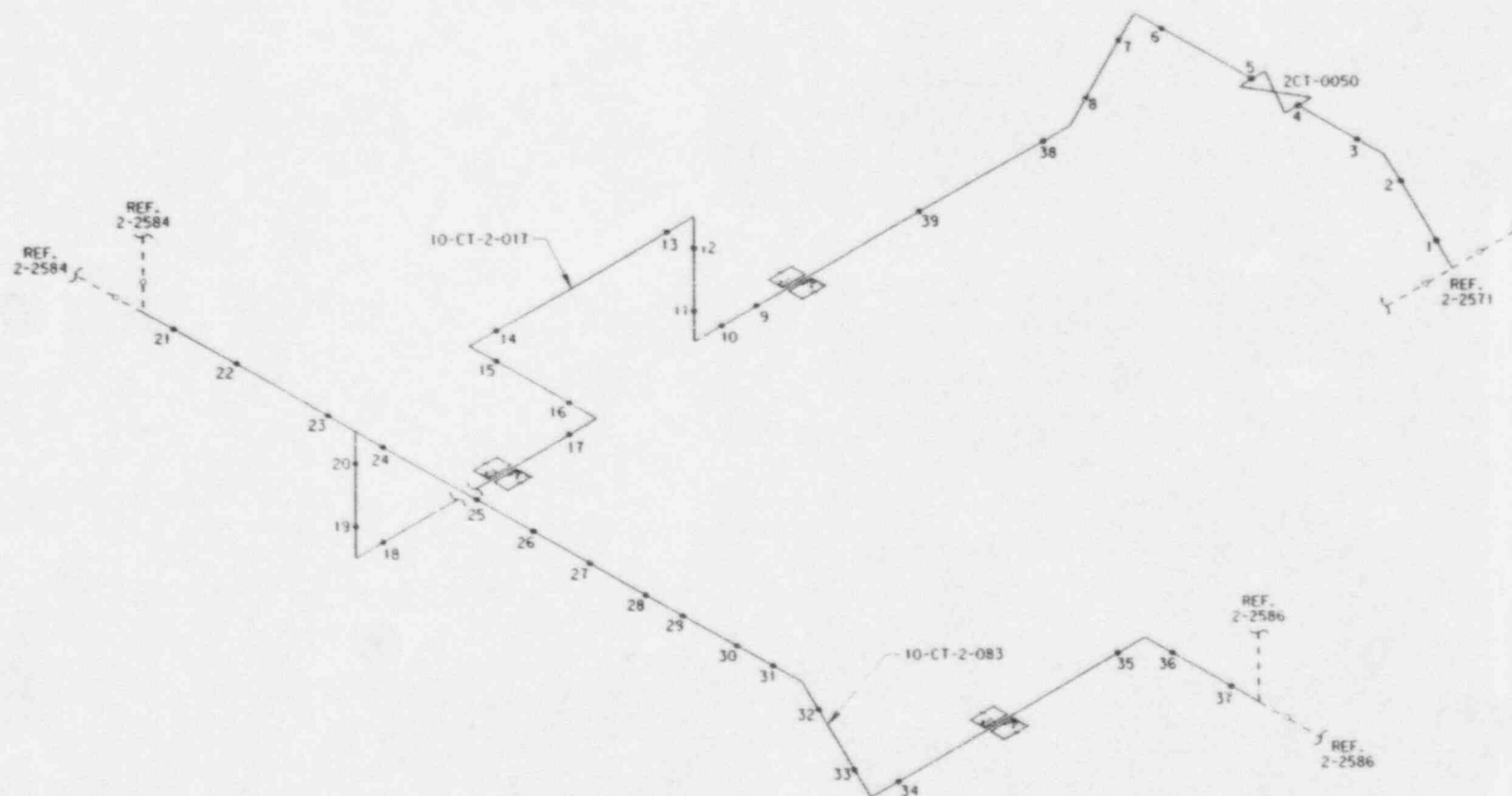
TCX-2-2584

REV. 1

09-01-94

TCX225841.151

130/134



ILLUSTRATIVE USE ONLY

NOTES: 10" SCH 40 PIPING IS INCLUDED FOR POPULATION ONLY.

DESCRIPTION: CONTAINMENT SPRAY

T/SCH: (10"), 365"/40

BRP: CT-2-SB-037, CT-2-SB-038, CT-2-SB-039,

CT-2-SB-042

FLOW: M2-0232

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

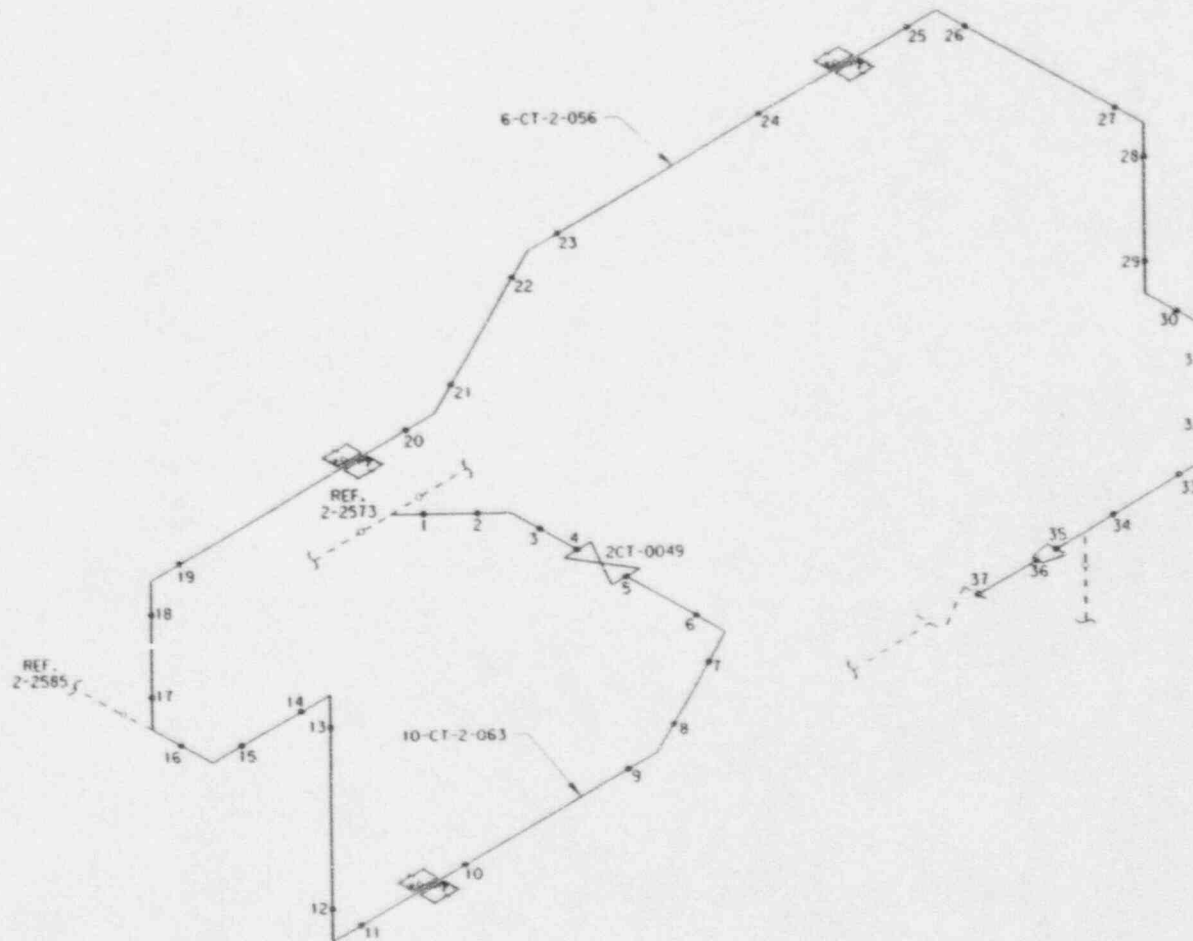
APPROVAL: *RB May, RB May 8-1-84*

TCX-2-2585

REV. 1

09-01-94

TCX-2-2585(1.151)



ILLUSTRATIVE USE ONLY

NOTES: 6" AND 10" SCH 40 PIPING IS INCLUDED FOR
POPULATION ONLY.

DESCRIPTION: CONTAINMENT SPRAY

T/SCH: (10"), 365"/40, (6"), 280"/40

BRP: CT-2-SB-019, CT-2-SB-035, CT-2-SB-037,
CT-2-SB-044

FLOW: M2-0232

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

TCX-2-2586

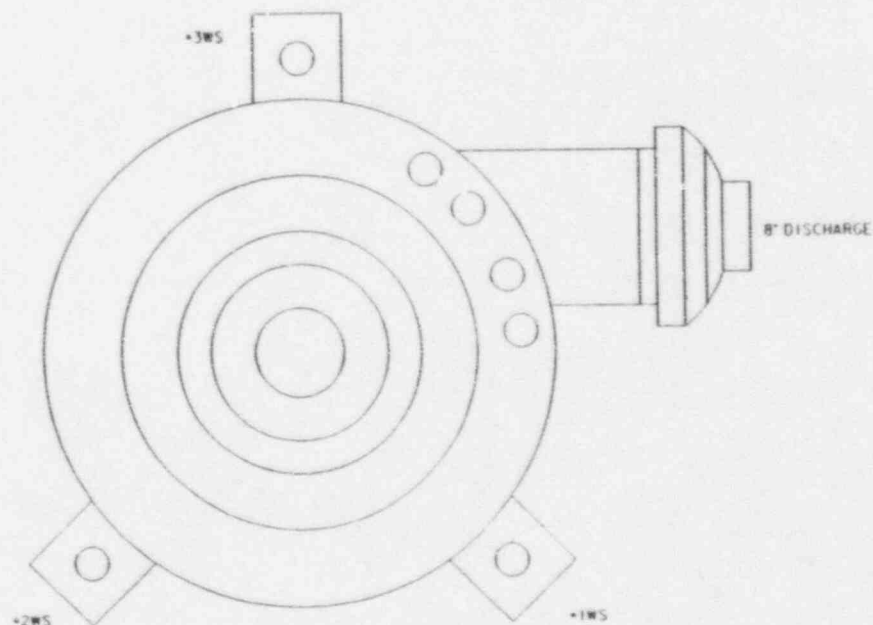
REV. 1

09-01-94

APPROVAL: *RB Mays RB Mays* 9-1-94

TCX225861.151

132/134



ILLUSTRATIVE USE ONLY

NOTES: • PUMP DESIGNATION PRECEDES ITEM IDENTIFICATION.

DESCRIPTION: RHR PUMPS 1 & 2

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

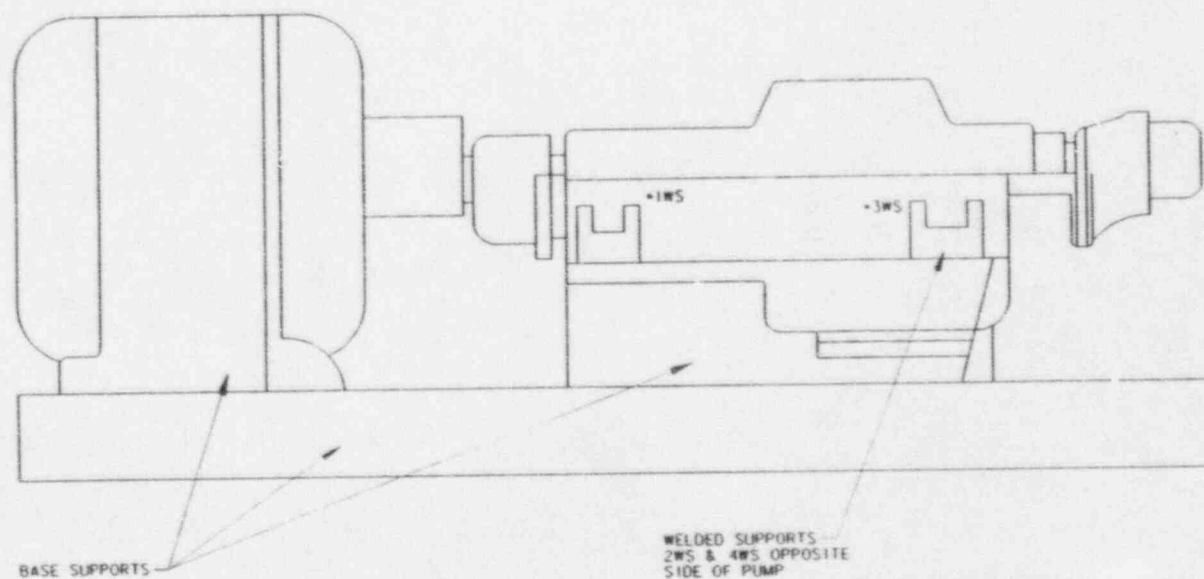
APPROVAL: *RB May BB May 9-1-91*

TCX-2-3100

REV. 1

03-01-94

133/134



ILLUSTRATIVE USE ONLY

NOTES: • PUMP DESIGNATION PRECEDES ITEM IDENTIFICATION

DESCRIPTION: CS CHARGING PUMPS 1 & 2

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB May 9-1-94*

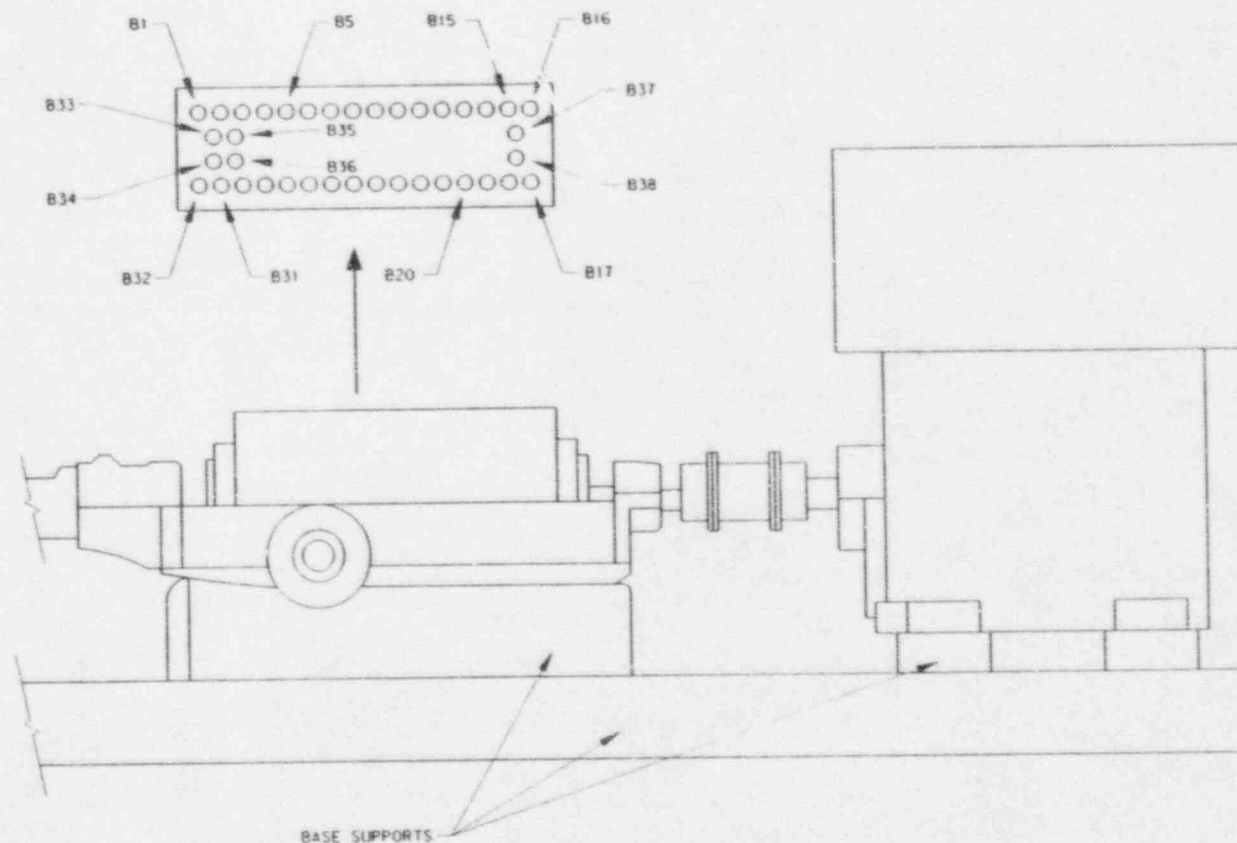
TCX-2-3110

REV. 1

09-01-94

TCX-2-3110-151

134/134



BASE SUPPORTS

ILLUSTRATIVE USE ONLY

NOTES: PUMP DESIGNATION PRECEDES ITEM IDENTIFICATION. B33 THRU B38 DO NOT REQUIRE EXAMINATION AND ARE SHOWN HERE FOR LOCATION REFERENCE ONLY.

DESCRIPTION: SAFETY INJECTION PUMPS 1 & 2

32 - 2.125" DIA. (B1 THRU B32),
6 - 1.5" DIA. (B33 THRU B38)

TU ELECTRIC
CPSES UNIT 2

INSERVICE INSPECTION
LOCATION ISOMETRIC

APPROVAL: *RB Mays* *AS dwp* 9-1-94

TCX-2-3140

REV. 1

09-01-94

TCX-2-3140,1,1,1