67 M 2-47E610-43-1-ISI

DESIGN PRESSURE 20 PSIG, 30 IN. Hg VACUUM • 160°F
TEST PRESSURE 30 PSIG
DESIGN PRESSURE 160 PSIG • 103°F
TEST PRESSURE 240 PSIG
CONDENSATE SYSTEM

HOTWELL A | HOTWELL B | HOTWELL C

DCN T40646

STRAINER | FROM RT VLV 2-501 | FROM RT VLV 2-502 | FROM RT VLV 2-503

SAMPLE PUMP A | SAMPLE PUMP B | SAMPLE PUMP C

DWNRLZ WTR 0-47E656-1,C3

DESIGN PRESSURE 450 PSIG • 300°F
TEST PRESSURE 675 PSIG
RHR SERVICE WATER

DISCHARGE FROM RHR HX A | DISCHARGE FROM RHR HX B | DISCHARGE FROM RHR HX C | DISCHARGE FROM RHR HX D

DRW

SAMPLE RETURN | CRW | TO CRW | OVERFLOW | LEVEL RESERVOIR | HOTWELL SAMPLE RETURN PUMP | TO COND

DESIGN PRESSURE 1326 PSIG • 562°F
TEST PRESSURE 1989 PSIG
REACTOR RECIRCULATION PUMP DISCHARGE

PENETRATION X41

CRACK MONITORING SAMPLE (FUTURE)

TO RBCCW | FROM RBCCW

SYSTEM PRESS.- TEMP DATA

| LINE NO. | DESIGN PRESS.(PSIG) | DESIGN TEMP(°F) | TEST PRESS.(PSIG) |
|---|---|---|---|
| 1 | 1300 | 150 | 1725 |
| 2 | 50 | 100 | 75 |

DESIGN PRESSURE 450 PSIG • 310°F
TEST PRESSURE 675 PSIG
CONDENSATE SYSTEM

BETWEEN HTR A6 & B5 | BETWEEN HTR B4 & B3 | BETWEEN HTR C4 & C3 | BETWEEN HTR A3 & MFWA | BETWEEN HTR B3 & MFWB | BETWEEN HTR C3 & MFWC

SEE NOTE 3

FROM FEEDWATER SYSTEM 2-47E610-43-2

DESIGN PRESSURE 450 PSIG • 300°F
TEST PRESSURE 675 PSIG
DESIGN PRESSURE 160 PSIG • 103°F
TEST PRESSURE 240 PSIG
CONDENSATE SYSTEM
DESIGN PRESSURE 160 PSIG • 103°F
TEST PRESSURE 240 PSIG

FILTER RETURN | FILTER SUPPLY | SAMPLE SUPPLY / CDI (TYP)

FROM HOTWELL SAMPLE PUMPS A B C

TO SAMPLE SINK | TO CRW | ADMIN

INLET HDR

DESIGN PRESSURE 150 PSIG • 210°F
TEST PRESSURE 225 PSIG
RHR SYSTEM

RHR FLUSH

SUPP POOL DISCH TO RHR PUMPS A & C | SUPP POOL DISCH TO RHR PUMPS B & D

SEE NOTE 3

CRW (CLOSED)

CONDENSATE DEMINERALIZER SAMPLE RETURN PUMP | LEVEL RESERVOIR | TO CONDENSER 2-47E805-1,C8

COMPANION DRAWINGS: LATER

ISSUED BY: *

SEE BELOW FOR DESIGN AND TEST DATA
REACTOR WATER CLEANUP SYSTEM

DWNRLZR 2A INFLUENT 69-739

BEFORE FILTER DWNRLZR A & B | AFTER FILTER DWNRLZR A | AFTER FILTER DWNRLZR B

HPFH=HIGH PRESS FILTER HOLDER

SHV-43-1506 | SHV-46-1507

LVL RSVR | FROM XT-43-1B (THIS DWG. F6)

FROM DEMIN WATER 2-47E856-2, D6

SAMPLE RETURN PUMP | OVERFLOW | CRW (CLOSED)

SEE BELOW FOR DESIGN AND TEST DATA
MAIN STEAM SYSTEM

BEFORE STOP VALVE, LINE A | BEFORE STOP VALVE, LINE B | BEFORE STOP VALVE, LINE C | BEFORE STOP VALVE, LINE D

CONSTANT TEMP BATH

DRW (CLOSED)

SYSTEM PRESS.- TEMP DATA

| LINE NO. | DESIGN PRESS.(PSIG) | DESIGN TEMP(°F) | TEST PRESS.(PSIG) |
|---|---|---|---|
| MAIN STEAM | | | |
| 1 | 1146 | 562 | 1725 |
| DEMINERALIZED WATER | | | |
| 2 | 100 | 70 | 150 |

FOR ASME SECTION XI USE ONLY

- ASME CODE CLASS 1 EQUIVALENT
- ASME CODE CLASS 2 EQUIVALENT
- ASME CODE CLASS 3 EQUIVALENT
- ASME CODE CLASS MC EQUIVALENT
- NON NUCLEAR CODE CLASS

ISI DRAWING WAS ISSUED FOR BASELINE DWG: 2-47E610-43-1 REV: 022

NOTES:
1. FOR ADDITIONAL REFERENCE DRAWINGS SEE 2-47E822-1.
2. ANNUNCIATORS SHOWN AS BEING ON PANEL 25-126 WILL BE MOUNTED TO A LUNDELL ANNUNCIATOR.
3. PORTABLE MOISTURE ANALYZER TO BE SUPPLIED BY DPP.
4. HYDROSTATIC TESTING SHALL BE IN ACCORDANCE WITH THE APPLICABLE CODES. SEE APPROPRIATE PROCESS SYSTEM FLOW DIAGRAM FOR FURTHER INFORMATION.
5. [1],[2],[3], ETC. DENOTES DESIGN PRESSURE AND TEMPERATURE AS GIVEN IN TABLES ON THESE DRAWINGS.
6. THE DESIGN PRESSURE AND TEMPERATURE OF ALL DRAIN AND VENT LINES THRU THE LAST ISOLATION VALVE SHALL BE THE SAME AS THE PROCESS LINE.
7. ALL VALVES SHALL BE TAGGED WITH THE APPROPRIATE SYSTEM NUMBER. ALL COMPONENTS SHALL BE PREFIXED WITH "2-" UNLESS OTHERWISE NOTED.
8. UNIDS ON DRAWING ARE FOR REFERENCE ONLY AND ARE ABBREVIATED TO MEET SPACE CONSTRAINTS. REFER TO MCL FOR COMPLETE UNIDS.
9. ISI SUFFIX FROM REFERENCE CONTINUATION DWG HAS BEEN OMITTED, AS APPLICABLE.
10. THE ISI CODE CLASS DRAWING DOES NOT NECESSARILY REPRESENT THE ACTUAL CONFIGURATION.

REFERENCE DRAWINGS:
0-47E600-1.....FLOW DIAGRAM - GENERAL PLANT SYSTEM
0-47E600-1.....MECHANICAL - SYMBOLS & FLOW DIAGRAM DRAWING INDEX
2-47E822-1.....FLOW DIAGRAM - REACTOR BLDG CLOSED COOLING WATER SYSTEM
2-47E611-1-SERIES...MECHANICAL LOGIC DIAGRAM MAIN STEAM

SYMBOLS:
- $H_2Z$ CATION EXCHANGER
- + INDICATES PROCESS CONNECTION
- HOODED SAMPLE STATION
- [G] GRAB SAMPLE

WATER CHILLER | DEMIN WATER MAKEUP 0-47E856-1, G4

CHILLER COMMON TO CDI, HOTWELL A, B AND C, FEEDWATER, CDE, AND POLISHER VESSEL A THROUGH J SAMPLES

FOR TAGGING INFORMATION SEE (2-47E610-43-6) DET A6

FROM 2-831 CDE HEADER 2-47E833-1, H1

* FOR ORIGINAL SIGNATURES AND PREVIOUS REVISIONS, SEE MICROFILM COPY.

| | | | | | |
|---|---|---|---|---|---|
| 005 | DCN T40646 ADMIN | KLC | DMC | RLD | |

REVISED PER DCA T40646-058-000, DCN F41354, DCN T40646; CORRECTED DRAFTING ERROR (ADMINISTRATIVE REVISION).

| REV | CHANGE REF | PREPARER | CHECKER | APPROVED | DATE |
|---|---|---|---|---|---|

SCALE: NONE — EXCEPT AS NOTED

POWERHOUSE UNIT 2 — SYSTEM NO. 43

# ASME SECTION XI MECHANICAL CONTROL DIAGRAM SAMPLING AND WATER QUALITY SYS CODE CLASS BOUNDARIES

**BROWNS FERRY NUCLEAR PLANT**
TENNESSEE VALLEY AUTHORITY

| DESIGN | | INITIAL ISSUE | ENGINEERING APPROVAL |
|---|---|---|---|
| DRAFTER CASI | CHECKER * | | 1 * |
| DESIGNER * | REVIEWER * | | 2 * 3 * |
| DATE * | 67 | M | 2-47E610-43-1-ISI | R005 |
| | | | CCD |

D-10

PCADAM 8 7 6 5 4 3 2 H G F E D C B A