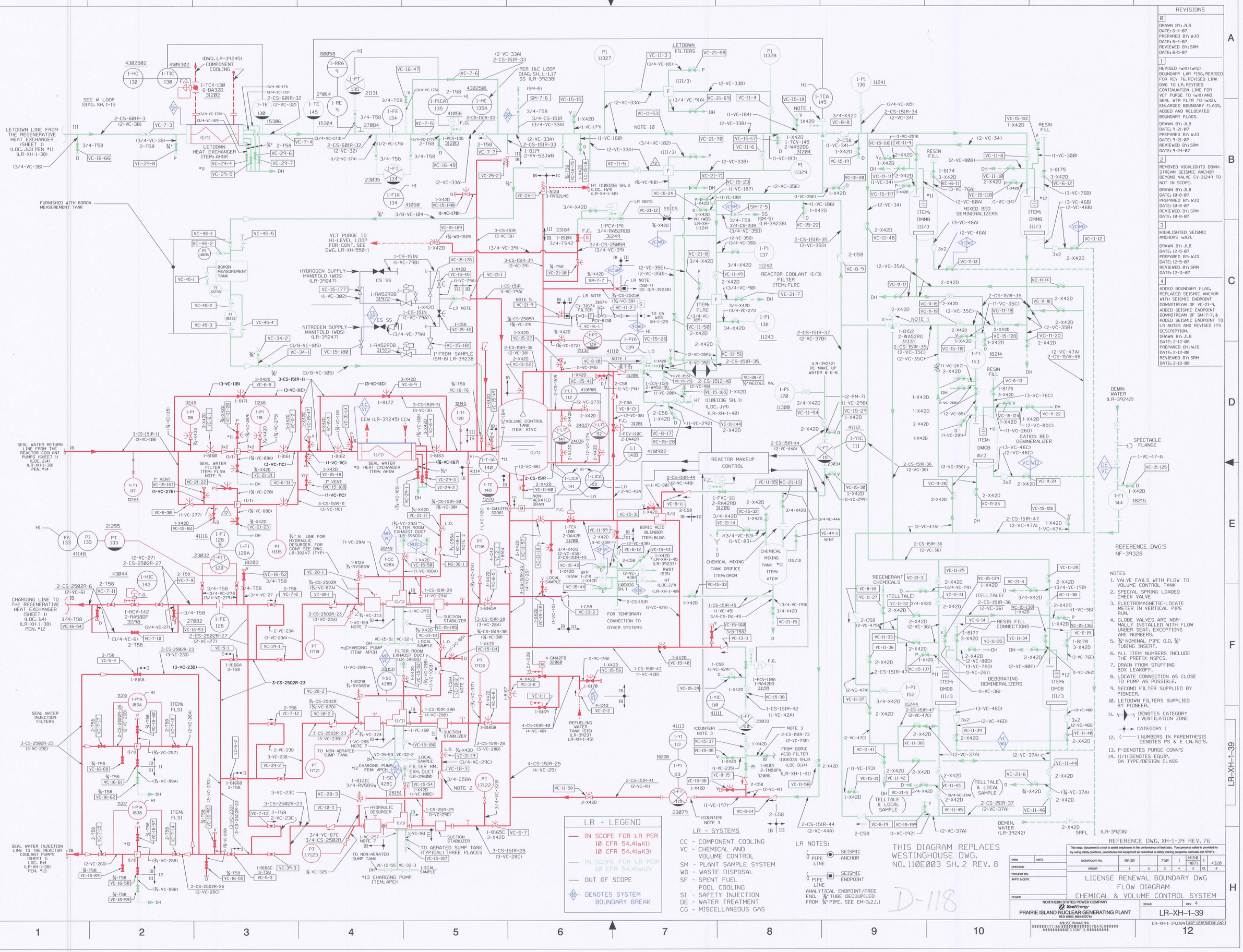
REVISIONS
0
DRAWN BY: JLB
DATE: 6-4-07
PREPARED BY: WJO
DATE: 6-4-07
REVIEWED BY: SRM
DATE: 6-5-07
1
REVISED (a)(1) (a)(2) BOUNDARY LAR *156, REVISED FOR REV 76, REVISED LINK DWG TO LR, REVISED CONTINUATION LINE FOR VCT PURGE TO (a)(1) AND SEAL WTR FLTR TO (a)(2), ENLARGED BOUNDARY FLAGS, ADDED AND RELOCATED BOUNDARY FLAGS.
DRAWN BY: JLB
DATE: 9-21-07
PREPARED BY: WJO
DATE: 9-21-07
REVIEWED BY: SRM
DATE: 9-24-07
2
REMOVED HIGHLIGHTS DOWNSTREAM SEISMIC ANCHOR BEYOND VALVE CV-31249 TO NOT IN SCOPE.
DRAWN BY: JLB
DATE: 10-8-07
PREPARED BY: WJO
DATE: 10-8-07
REVIEWED BY: SRM
DATE: 10-8-07
3
HIGHLIGHTED SEISMIC ANCHORS (a)(2).
DRAWN BY: JLB
DATE: 12-5-07
PREPARED BY: WJO
DATE: 12-5-07
REVIEWED BY: SRM
DATE: 12-11-07
4
ADDED BOUNDARY FLAG, REPLACED SEISMIC ANCHOR WITH SEISMIC ENDPOINT DOWNSTREAM OF VC-21-9, ADDED SEISMIC ENDPOINT DOWNSTREAM OF SM-7-7, & ADDED SEISMIC ENDPOINT TO LR NOTES AND REVISED ITS DESCRIPTION.
DRAWN BY: JLB
DATE: 2-12-08
PREPARED BY: WJO
DATE: 2-12-08
REVIEWED BY: SRM
DATE: 2-12-08
LETDOWN LINE FROM THE REGENERATIVE HEAT EXCHANGER (SHEET 1) (LOC. J13) PEN *11 (LR-XH-1-38)
LETDOWN HEAT EXCHANGER ITEM: AHNR
LETDOWN FILTERS
VOLUME CONTROL TANK ITEM: ATVC
REACTOR MAKEUP CONTROL
BORIC ACID BLENDER ITEM: BLBA
CHEMICAL MIXING TANK ITEM: ATCM
MIXED BED DEMINERALIZERS
CATION BED DEMINERALIZER
DEBORATING DEMINERALIZERS
RESIN FILL
REACTOR COOLANT (1/3) FILTER ITEM: FLRC
BORON MEASUREMENT TANK
FURNISHED WITH BORON MEASUREMENT TANK
VCT PURGE TO HI-LEVEL LOOP FOR CONT. SEE DWG. LR-XH-550-1
HYDROGEN SUPPLY MANIFOLD (WDS) (LR-39247)
NITROGEN SUPPLY MANIFOLD (WDS) (LR-39247)
CCW (LR-39245) CCW
SEAL WATER HEAT EXCHANGER ITEM: AHSW
SEAL WATER FILTER ITEM: FLSW
SEAL WATER INJECTION FILTERS
SEAL WATER RETURN LINE FROM THE REACTOR COOLANT PUMPS (SHEET 1) (LOC. J14) (LR-XH-1-38) PEN. *14
SEAL WATER INJECTION LINE TO THE REACTOR COOLANT PUMPS (SHEET 1) LOC. B14 (LR-XH-1-38) PEN. *13
CHARGING LINE TO THE REGENERATIVE HEAT EXCHANGER (SHEET 1) (LOC. B14) (LR-XH-1-38) PEN. *12
NON-AERATED DRAIN
SUCTION STABILIZER
TO AERATED SUMP TANK (TYPICAL) IN THREE PLACES
TO NON-AERATED SUMP TANK
REFUELING WATER TANK (SIS) (LR-39237 LR-XH-1-45)
FROM BORIC ACID FILTER (110E036 SH.2) (LOC. D14) (LR-XH-1-41)
RC MAKE UP WATER @ E-8
DEMIN WATER (LR-39242)
SPECTACLE FLANGE
DEMIN. WATER (LR-39242)
FOR TEMPORARY CONNECTION TO OTHER SYSTEMS
LR - LEGEND
IN SCOPE FOR LR PER 10 CFR 54.4(a)(1) 10 CFR 54.4(a)(3)
IN SCOPE FOR LR PER 10 CFR 54.4(a)(2)
OUT OF SCOPE
DENOTES SYSTEM BOUNDARY BREAK
LR - SYSTEMS
CC - COMPONENT COOLING
VC - CHEMICAL AND VOLUME CONTROL
SM - PLANT SAMPLE SYSTEM
WD - WASTE DISPOSAL
SF - SPENT FUEL POOL COOLING
SI - SAFETY INJECTION
DE - WATER TREATMENT
CG - MISCELLANEOUS GAS
LR NOTES:
SEISMIC ANCHOR
SEISMIC ENDPOINT
ANALYTICAL ENDPOINT/FREE END. 3/4" TUBE DECOUPLED FROM 3/4" PIPE. SEE EM-3.2.1.1
REFERENCE DWG'S
NF-39328
NOTES
1. VALVE FAILS WITH FLOW TO VOLUME CONTROL TANK
2. SPECIAL SPRING LOADED CHECK VALVE
3. ELECTROMAGNETIC-LOCATE METER IN VERTICAL PIPE RUN.
4. GLOBE VALVES ARE NORMALLY INSTALLED WITH FLOW UNDER SEAT. EXCEPTIONS ARE NUMBERS.
5. 3/4" NOMINAL PIPE O.D. 3/8" TUBING INSERT.
6. ALL ITEM NUMBERS INCLUDE THE PREFIX NSPCS.
7. DRAIN FROM STUFFING BOX LEAKOFF.
8. LOCATE CONNECTION AS CLOSE TO PUMP AS POSSIBLE.
9. SECOND FILTER SUPPLIED BY PIONEER.
10. LETDOWN FILTERS SUPPLIED BY PIONEER.
11. DENOTES CATEGORY I VENTILATION ZONE
12. ( ) NUMBERS IN PARENTHESIS DENOTES PS & E LN. NO'S.
13. P-DENOTES PURGE CONN'S
14. (1/1) DENOTES EQUIP. QA TYPE/DESIGN CLASS
THIS DIAGRAM REPLACES WESTINGHOUSE DWG. NO. 110E003 SH. 2 REV. 8
D-118
REFERENCE DWG. LR-XH-1-39 REV. 76
This map / document is a tool to assist employees in the performance of their jobs. Your personal safety is provided for by using safety practices, procedures and equipment as described in safety training programs, manuals and SPAR's.
DWN DATE
CHECKED
PROJECT NO.
APP'D & CERT.
FILMED
SIGNIFICANT NO. 8630 750 1 M150 1 4320
GROUP 1 2 3 4 5 QL 6
LICENSE RENEWAL BOUNDARY DWG
FLOW DIAGRAM
CHEMICAL & VOLUME CONTROL SYSTEM
NORTHERN STATES POWER COMPANY
Xcel Energy
PRAIRIE ISLAND NUCLEAR GENERATING PLANT
RED WING, MINNESOTA
SCALE
REV 4
LR-XH-1-39
$$USERNAME$$
$$$$$$SYTIME$$$$$$$$$$SYDATE$$$$$$
$$$$$$$$$$DESIGNFILE$$$$$$$$$$
LR-XH-1-39.DGN MSP GENERATION CAD
LR-39236
LR-XH-1-39