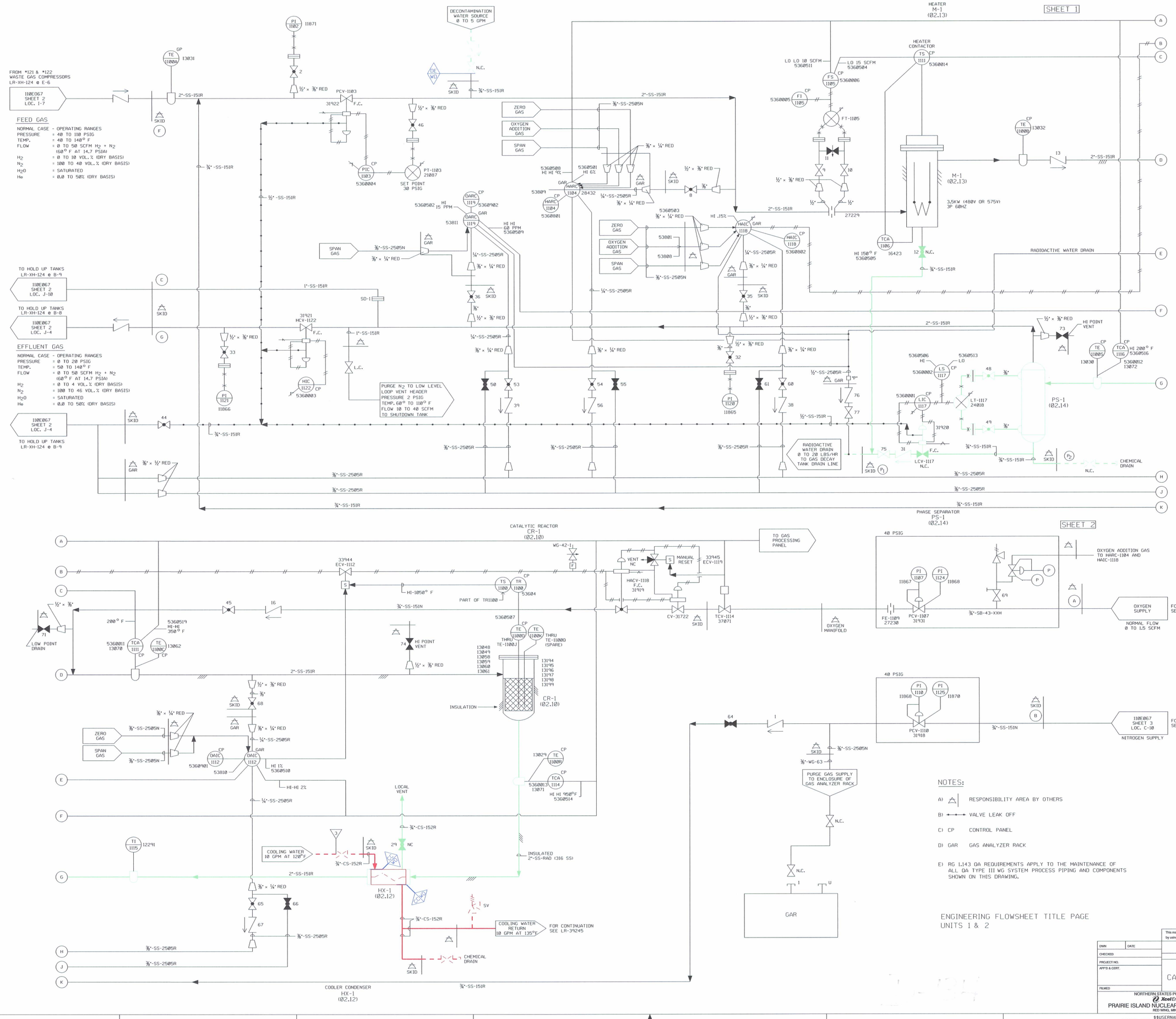
REVISIONS
0
DRAWN BY: JLB
DATE: 2-22-07
PREPARED BY: RAB
DATE: 2-22-07
REVIEWED BY: SRM
DATE: 2-22-07
1
ADDED BOUNDARY FLAG, ADDED DE TO LR-SYSTEMS LEGEND, HIGHLIGHTED 121 CATALYTIC H2 RECOMBINER HX TUBES (@3) AND END BELLS (@2) & HIGHLIGHTED DE CONTINUATION LINE(@2).
DRAWN BY: JLB
DATE: 8-27-07
PREPARED BY: WJO
DATE: 8-27-07
REVIEWED BY: SRM
DATE: 9-14-07
FEED GAS
NORMAL CASE - OPERATING RANGES
PRESSURE = 40 TO 110 PSIG
TEMP. = 40 TO 140° F
FLOW = 0 TO 50 SCFM H2 + N2 (60° F AT 14.7 PSIA)
H2 = 0 TO 10 VOL.% (DRY BASIS)
N2 = 100 TO 40 VOL.% (DRY BASIS)
H2O = SATURATED
He = 0.0 TO 50% (DRY BASIS)
EFFLUENT GAS
NORMAL CASE - OPERATING RANGES
PRESSURE = 0 TO 20 PSIG
TEMP. = 50 TO 140° F
FLOW = 0 TO 50 SCFM H2 + N2 (60° F AT 14.7 PSIA)
H2 = 0 TO 4 VOL.% (DRY BASIS)
N2 = 100 TO 46 VOL.% (DRY BASIS)
H2O = SATURATED
He = 0.0 TO 50% (DRY BASIS)
FROM *121 & *122 WASTE GAS COMPRESSORS LR-XH-124 @ E-6
110E067 SHEET 2 LOC. I-7
TO HOLD UP TANKS LR-XH-124 @ B-9
110E067 SHEET 2 LOC. J-10
TO HOLD UP TANKS LR-XH-124 @ B-8
110E067 SHEET 2 LOC. J-4
TO HOLD UP TANKS LR-XH-124 @ B-9
110E067 SHEET 2 LOC. J-4
DECONTAMINATION WATER SOURCE @ 5 GPM
HEATER M-1 (@2.13)
SHEET 1
HEATER CONTACTOR
3.5KW (480V OR 575V) 3P 60HZ
RADIOACTIVE WATER DRAIN
PURGE N2 TO LOW LEVEL LOOP VENT HEADER PRESSURE 2 PSIG TEMP. 60° TO 110° F FLOW 10 TO 40 SCFM TO SHUTDOWN TANK
RADIOACTIVE WATER DRAIN @ TO 20 LBS/HR TO GAS DECAY TANK DRAIN LINE
PHASE SEPARATOR PS-1 (@2.14)
CHEMICAL DRAIN
CATALYTIC REACTOR CR-1 (@2.10)
SHEET 2
TO GAS PROCESSING PANEL
OXYGEN MANIFOLD
OXYGEN ADDITION GAS TO HAIC-1104 AND HAIC-1118
OXYGEN SUPPLY
FOR CONTINUATION SEE LR-39247-2
NORMAL FLOW @ TO 1.5 SCFM
NITROGEN SUPPLY
110E067 SHEET 3 LOC. C-10
FOR CONTINUATION SEE LR-XH-550-1
PURGE GAS SUPPLY TO ENCLOSURE OF GAS ANALYZER RACK
GAR
INSULATION
HX-1 (@2.12)
COOLER CONDENSER HX-1 (@2.12)
COOLING WATER @ 10 GPM AT 120°F
COOLING WATER RETURN @ 10 GPM AT 135°F
FOR CONTINUATION SEE LR-39245
LOCAL VENT
INSULATED 2"-SS-RAD (316 SS)
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
NOTES:
A) RESPONSIBILITY AREA BY OTHERS
B) VALVE LEAK OFF
C) CP CONTROL PANEL
D) GAR GAS ANALYZER RACK
E) RG 1.143 QA REQUIREMENTS APPLY TO THE MAINTENANCE OF ALL QA TYPE III WG SYSTEM PROCESS PIPING AND COMPONENTS SHOWN ON THIS DRAWING.
LR - SYSTEM
WD - WASTE DISPOSAL
CC - COMPONENT COOLING
DE - WATER TREATMENT
ENGINEERING FLOWSHEET TITLE PAGE UNITS 1 & 2
REFERNCE DWG X-HIAW-550-6-1 REV. F
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.
SIGNIFICANT NO. 8630
GROUP
DWN DATE
CHECKED
PROJECT NO.
APP'D & CERT.
FILMED
LICENSE RENEWAL BOUNDARY DWG
CATALYTIC HYDROGEN RECOMBINER-A(*121)
SPIN NSP-GHRECA-02 (LOW LEVEL)
NORTHERN STATES POWER COMPANY
Xcel Energy
PRAIRIE ISLAND NUCLEAR GENERATING PLANT
RED WING, MINNESOTA
SCALE NONE
REV 1
LR-XH-550-6-1
LR-XH-550-6-1.DGN
NSP GENERATION CAD
$$USERNAME$$
$$$$$$SYTIME$$$$$$$$$$SYDATE$$$$$$$
$$$$$$$$$$DESIGNFILE$$$$$$$$$$