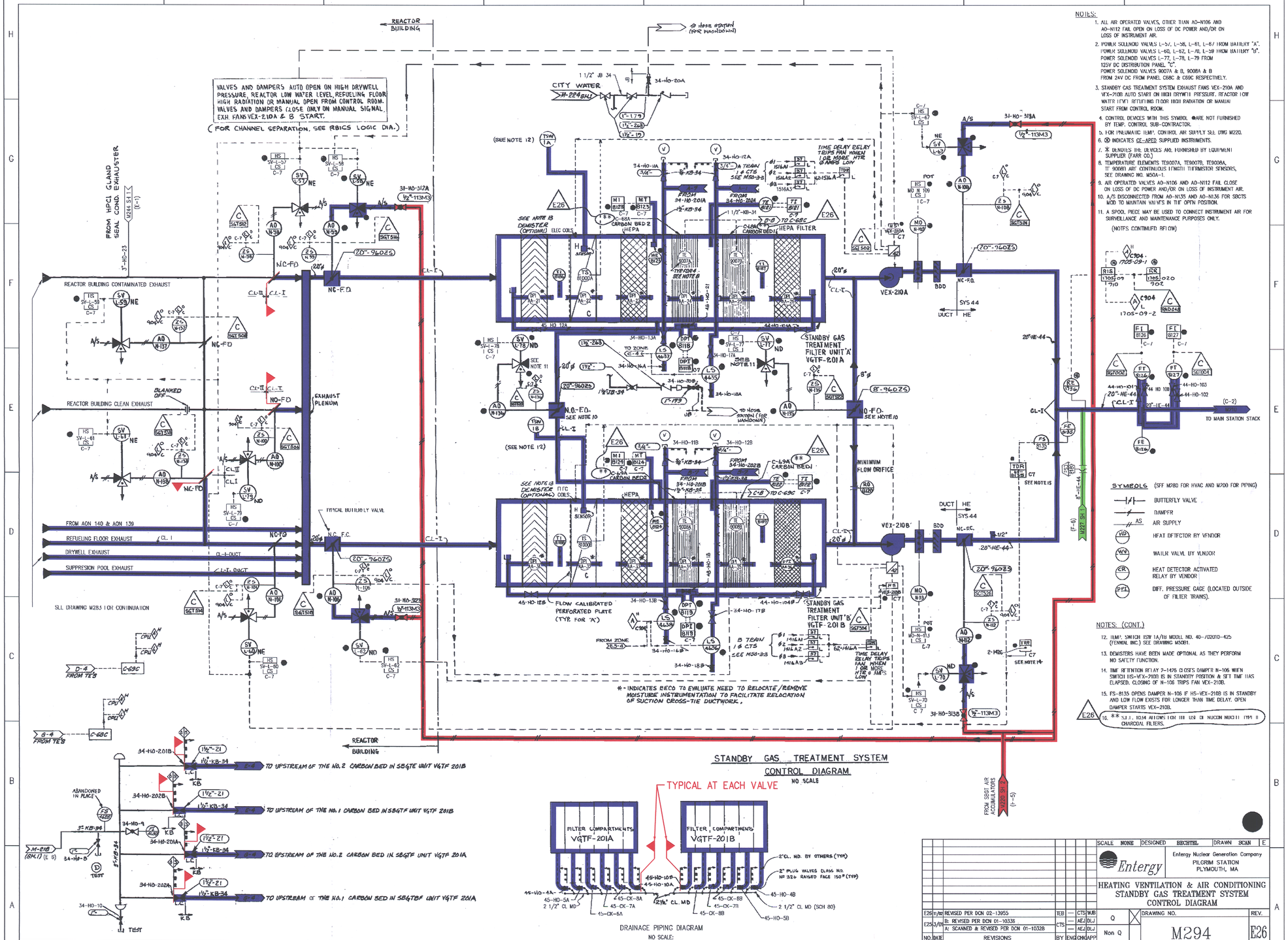
VALVES AND DAMPERS AUTO OPEN ON HIGH DRYWELL PRESSURE, REACTOR LOW WATER LEVEL, REFUELING FLOOR HIGH RADIATION OR MANUAL OPEN FROM CONTROL ROOM. VALVES AND DAMPERS CLOSE ONLY ON MANUAL SIGNAL. EXH. FANS VEX-210A & B START.
(FOR CHANNEL SEPARATION, SEE RBICS LOGIC DIA.)
REACTOR BUILDING
CITY WATER
FROM HPCI GLAND SEAL COND. EXHAUSTER
REACTOR BUILDING CONTAMINATED EXHAUST
REACTOR BUILDING CLEAN EXHAUST
EXHAUST PLENUM
FROM AON 140 & AON 139
REFUELING FLOOR EXHAUST
DRYWELL EXHAUST
SUPPRESSION POOL EXHAUST
SEE DRAWING M285 FOR CONTINUATION
DEMISTER (OPTIONAL) ELEC COILS
CARBON BED 2
HEPA
HEPA FILTER
STANDBY GAS TREATMENT FILTER UNIT 'A' VGTF-201A
STANDBY GAS TREATMENT FILTER UNIT 'B' VGTF-201B
VEX-210A
VEX-210B
MINIMUM FLOW ORIFICE
TO MAIN STATION STACK
FLOW CALIBRATED PERFORATED PLATE (TYP. FOR 'A')
* - INDICATES BECO TO EVALUATE NEED TO RELOCATE/REMOVE MOISTURE INSTRUMENTATION TO FACILITATE RELOCATION OF SUCTION CROSS-TIE DUCTWORK.
TO UPSTREAM OF THE NO.2 CARBON BED IN SBGTE UNIT VGTF 201B
TO UPSTREAM OF THE NO.1 CARBON BED IN SBGTF UNIT VGTF 201B
TO UPSTREAM OF THE NO.2 CARBON BED IN SBGTF UNIT VGTF 201A
TO UPSTREAM OF THE NO.1 CARBON BED IN SBGTDF UNIT VGTF 201A
ABANDONED IN PLACE
TEST
STANDBY GAS TREATMENT SYSTEM
CONTROL DIAGRAM
NO SCALE
TYPICAL AT EACH VALVE
FILTER COMPARTMENTS VGTF-201A
FILTER COMPARTMENTS VGTF-201B
DRAINAGE PIPING DIAGRAM
NO SCALE:
NOTES:
1. ALL AIR OPERATED VALVES, OTHER THAN AO-N106 AND AO-N112 FAIL OPEN ON LOSS OF DC POWER AND/OR ON LOSS OF INSTRUMENT AIR.
2. POWER SOLENOID VALVES L-57, L-58, L-61, L-67 FROM BATTERY "A". POWER SOLENOID VALVES L-60, L-62, L-70, L-98 FROM BATTERY "B". POWER SOLENOID VALVES L-77, L-78, L-79 FROM 125V DC DISTRIBUTION PANEL "C". POWER SOLENOID VALVES 8007A & B, 9008A & B FROM 24V DC FROM PANEL C68C & C68C RESPECTIVELY.
3. STANDBY GAS TREATMENT SYSTEM EXHAUST FANS VEX-210A AND VEX-210B AUTO START ON HIGH DRYWELL PRESSURE, REACTOR LOW WATER LEVEL, REFUELING FLOOR HIGH RADIATION OR MANUAL START FROM CONTROL ROOM.
4. CONTROL DEVICES WITH THIS SYMBOL ● ARE NOT FURNISHED BY TEMP. CONTROL SUB-CONTRACTOR.
5. FOR PNEUMATIC TEMP. CONTROL AIR SUPPLY SEE DWG M220.
6. ⊗ INDICATES CE-APED SUPPLIED INSTRUMENTS.
7. * DENOTES THE DEVICES ARE FURNISHED BY EQUIPMENT SUPPLIER (FARR CO.)
8. TEMPERATURE ELEMENTS TE9007A, TE9007B, TE9008A, TE 9008B ARE CONTINUOUS LENGTH THERMISTOR SENSORS, SEE DRAWING NO. M50A-1.
9. AIR OPERATED VALVES AO-N106 AND AO-N112 FAIL CLOSE ON LOSS OF DC POWER AND/OR ON LOSS OF INSTRUMENT AIR.
10. A/S DISCONNECTED FROM AO-N135 AND AO-N136 FOR SBGTS MOD TO MAINTAIN VALVES IN THE OPEN POSITION.
11. A SPOOL PIECE MAY BE USED TO CONNECT INSTRUMENT AIR FOR SURVEILLANCE AND MAINTENANCE PURPOSES ONLY.
(NOTES CONTINUED BELOW)
NOTES: (CONT.)
12. ILLUM. SWITCH ISW 1A/1B MODEL NO. 40-102010-425 (FENWAL INC.) SEE DRAWING M50B1.
13. DEMISTERS HAVE BEEN MADE OPTIONAL AS THEY PERFORM NO SAFETY FUNCTION.
14. TIME DEFINITION RELAY 2-1426 CLOSES DAMPER N-106 WHEN SWITCH HS-VEX-2101 IS IN STANDBY POSITION & SET TIME HAS ELAPSED. CLOSING OF N-106 TRIPS FAN VEX-210B.
15. FS-8135 OPENS DAMPER N-106 IF HS-VEX-2108 IS IN STANDBY AND LOW FLOW EXISTS FOR LONGER THAN TIME DELAY. OPEN DAMPER STARTS VEX-210B.
16. ** SEE NOTE 1. 10.54 ALLOWS FOR THE USE OF NUCON NUCSIL 1994 II CHARCOAL FILTERS.
SYMBOLS (SEE M280 FOR HVAC AND M200 FOR PIPING)
BUTTERFLY VALVE
DAMPER
AS AIR SUPPLY
HEAT DETECTOR BY VENDOR
WATER VALVE BY VENDOR
HEAT DETECTOR ACTIVATED RELAY BY VENDOR
DIFF. PRESSURE GAGE (LOCATED OUTSIDE OF FILTER TRAINS).
SYSTEM INTENDED FUNCTION BOUNDARY
COMPONENTS SUBJECT TO AMR
STANDBY GAS TREATMENT SYSTEM AMRM-07
PRIMARY CONTAINMENT ATMOSPHERE CONTROL SYSTEM AMRM-08
INSTRUMENT AIR SYSTEM AMRM-16
Entergy
Entergy Nuclear Generation Company
PILGRIM STATION
PLYMOUTH, MA
HEATING VENTILATION & AIR CONDITIONING
STANDBY GAS TREATMENT SYSTEM
CONTROL DIAGRAM
SCALE NONE DESIGNED BECHTEL DRAWN SCAN
DRAWING NO. M294 REV. E26
Q Non Q
REVISIONS
E26 11/96 REVISED PER DCN 02-13955
E25 3/01 B: REVISED PER DCN 01-10336
A: SCANNED & REVISED PER DCN 01-10328
41100-1995 FSAR DWG FIGURE (REV 16) 7.18-2
Q:\MECH\M294.CAL& DWG
THIS IS A Q-LIST DRAW.
0 11-15-05
REVISIONS
LRA-M-294-0
CAD FILE LRA-M-294_E26.DGN
MASTER FILE M294-CALS_E26.CAL