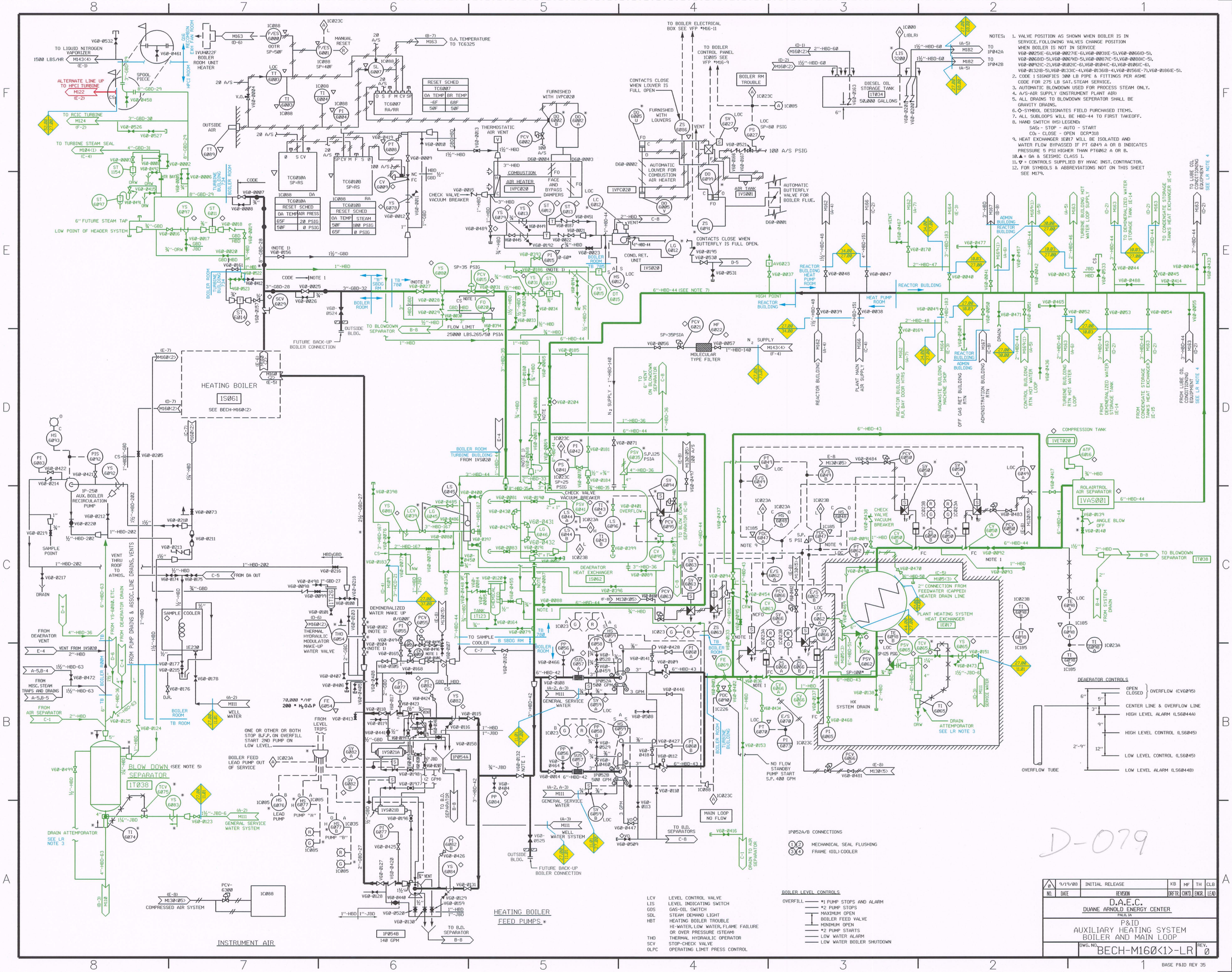

NOTES:

1. VALVE POSITION AS SHOWN WHEN BOILER IS IN SERVICE. FOLLOWING VALVES CHANGE POSITION WHEN BOILER IS NOT IN SERVICE
   V60-0025(E-6),V60-0027(E-6),V60-0031(E-5),V60-0066(D-5), V60-0068(D-5),V60-0069(D-5),V60-0087(C-5),V60-0088(C-5), V60-0092(C-2),V60-0102(C-6),V60-0104(C-6),V60-0106(C-6), V60-0132(B-5),V60-0133(C-4),V60-0136(B-4),V60-0156(E-7),V60-0186(E-5).
2. CODE 1 SIGNIFIES 300 LB PIPE & FITTINGS PER ASME CODE FOR 275 LB SAT. STEAM SERVICE.
3. AUTOMATIC BLOWDOWN USED FOR PROCESS STEAM ONLY.
4. A/S-AIR SUPPLY (INSTRUMENT PLANT AIR)
5. ALL DRAINS TO BLOWDOWN SEPERATOR SHALL BE GRAVITY DRAINS.
6. ◇-SYMBOL DESIGNATES FIELD PURCHASED ITEMS.
7. ALL SUBLOOPS WILL BE HBD-44 TO FIRST TAKEOFF.
8. HAND SWITCH (HS) LEGEND:
   SAS: - STOP - AUTO - START
   CO: - CLOSE - OPEN DCR*318
9. HEAT EXCHANGER 1E017 WILL BE ISOLATED AND WATER FLOW BYPASSED IF PT 6049 A OR B INDICATES PRESSURE 5 PSI HIGHER THAN PT6062 A OR B.
10. ▲ = QA & SEISMIC CLASS I.
11. ▽ = CONTROLS SUPPLIED BY HVAC INST. CONTRACTOR.
12. FOR SYMBOLS & ABBREVIATIONS NOT ON THIS SHEET SEE M179.

LR NOTES:

1. COMPONENTS AND PIPING LOCATED WITHIN THE TURBINE BUILDING AUXILIARY BOILER ROOM, REACTOR BUILDING RSCOMBINER EXHAUST FAN ROOM AND THE REACTOR BUILDING B12 HEAT ROOM DO NOT SPATIALLY AFFECT SAFETY RELATED EQUIPMENT AND ARE NOT IN SCOPE TO CRITERION 2.
2. ALL EXPOSED DRAIN PIPING AND FUNNELS ARE IN SCOPE FOR LICENSE RENEWAL.
3. DRAIN ATTEMPORATOR IS MADE UP OF PIPE AND FITTINGS AND IS EVALUATED AS PIPE
4. HEAT LOOP PIPING TO THE LUBE OIL CONDITIONER IS ISOLATED AND ABANDONED IN PLACE.

LR LEGEND:

- COMPONENTS IN SCOPE PER 10CFR54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 54.21
- COMPONENTS NOT SUBJECT TO AMR
- COMPONENTS IN SCOPE PER 10CFR54.4(a)(2) AND SUBJECT TO AMR PER 54.21
- SYSTEM BOUNDARY INTERFACE

10.03 PLANT VENTILATION
11.01 GENERAL SERVICE WATER
27.00 PLANT HEATING BOILER SYSTEM
30.00 CONTROL BUILDING HVAC SYSTEM
34.00 REACTOR BUILDING HVAC SYSTEM
37.00 CONDENSATE AND DEMIN WATER SYSTEM
68.00 SOLID RADWASTE
73.01 NITROGEN MAKEUP AND PURGE SYSTEM

NO.	DATE	REVISION	DRFTR	CHK'D	ENGR.	LEAD
0	9/19/08	INITIAL RELEASE	KB	MF	TH	CLB

D.A.E.C.
DUANE ARNOLD ENERGY CENTER
PALO, IA

P&ID
AUXILIARY HEATING SYSTEM
BOILER AND MAIN LOOP

DWG. NO. BECH-M160<1>-LR REV. 0

BASE P&ID REV 35