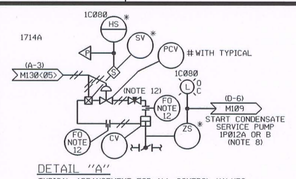
REF	TANK 1T013E (A-D TYP.)
DET A	1713E (A-D TYP.)
DET A	1714E (A-D TYP.)
DET A	1716E (A-D TYP.)
DET B	1717E (A-D TYP.)
DET C	1718E (A-D TYP.)
DET B	1720E (A-D TYP.)
DET B	1721E (A-D TYP.)
DET A	1723E (A-D TYP.)
DET D	1724E (A-D TYP.)
HS	1715E (A-D TYP.)
SV	1715E (A-D TYP.)
SX	1726E (A-D TYP.)
PDI	1727E (A-D TYP.)
PDT	1727E (A-D TYP.)
PDS	1727E (A-D TYP.)
PI	1728E (A-D TYP.)
PT	1728E (A-D TYP.)
PI	1762E (A-D TYP.)
YS	1730E (A-D TYP.)
PDIS	1731E (A-D TYP.)
FE	1732E (A-D TYP.)
FT	1732E (A-D TYP.)
FS	1732E (A-D TYP.)
FY	1732E (A-D TYP.)
FIC	1732E (A-D TYP.)
FS	1733E (A-D TYP.)
HS	1733E (A-D TYP.)
PP	1739E (A-D TYP.)
PP	1757E (A-D TYP.)
SUS	1709E (A-D TYP.)
FQI	1732E (A-D TYP.)
PCV	1732E (A-D TYP.)
PCV	1728E (A-D TYP.)
PCV	1727E (A-D TYP.)
FO	1722E (A-D TYP.)
PI	1757E (A-D TYP.)

1714A



DETAIL "A"

TYPICAL ARRANGEMENT FOR ALL CONTROL VALVES HS,SV & ZS CARRY THE SAME INSTRUMENT NUMBER AS THE CORRESPONDING CV.

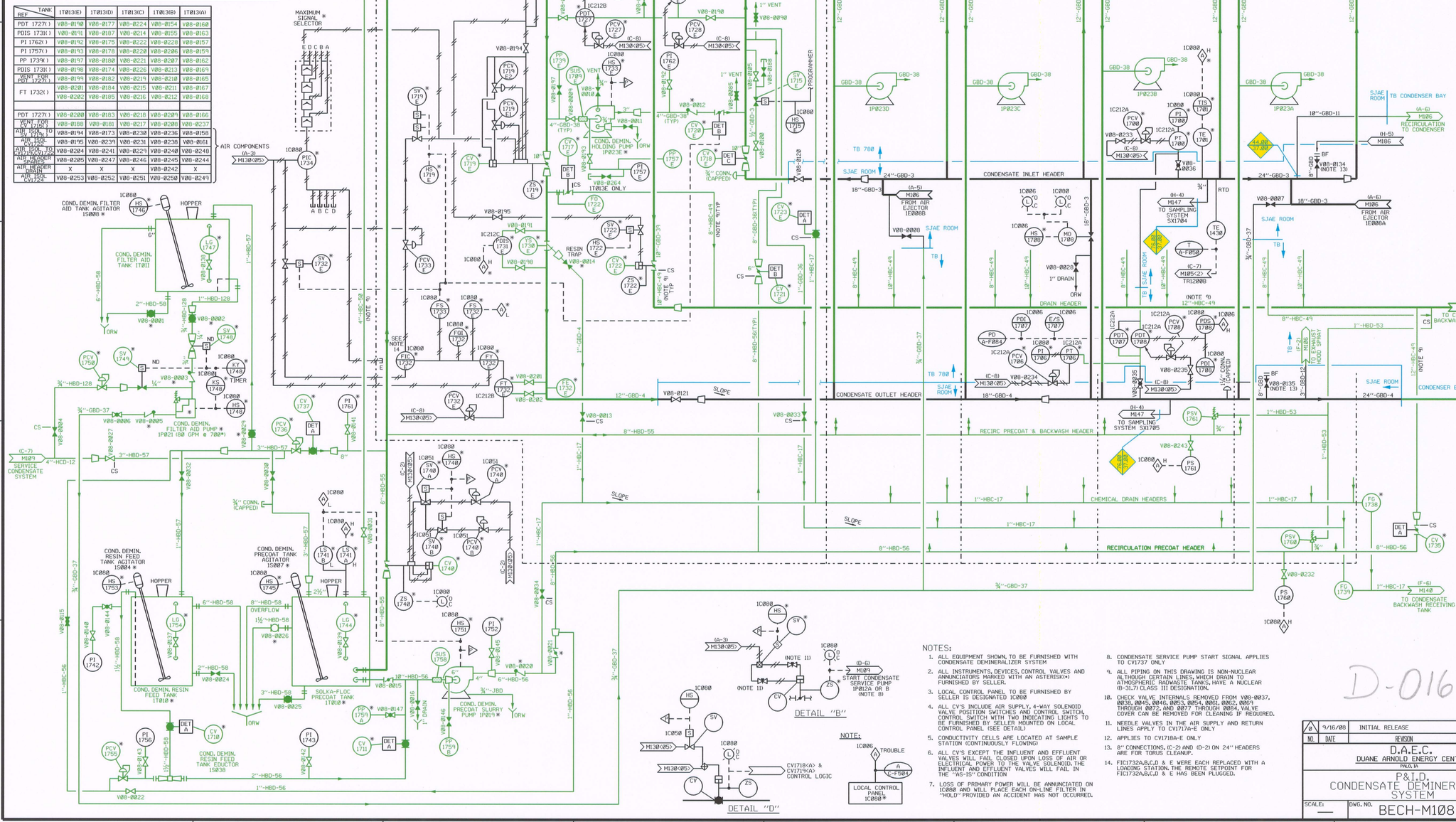
DETAIL "C"

SAME AS DETAIL "A" BUT WITH TWO SOLENOID COILS (ONE TO OPEN, ONE TO CLOSE CV).

VALVE SIMILARITY TABLE

LIST OF VALVES, NOT SHOWN, KEYED IN WITH 1T013E					
TANK 1T013E	1T013D	1T013C	1T013B	1T013A	
V08-0009	V08-0039	V08-0047	V08-0055	V08-0063	
V08-0010	V08-0040	V08-0048	V08-0056	V08-0064	
V08-0011	V08-0041	V08-0049	V08-0057	V08-0065	
V08-0012	V08-0042	V08-0050	V08-0058	V08-0066	
V08-0013	V08-0043	V08-0051	V08-0059	V08-0067	
V08-0033	V08-0044	V08-0052	V08-0060	V08-0068	
V08-0037	V08-0045	V08-0053	V08-0061	V08-0069	
V08-0038	V08-0046	V08-0054	V08-0062	V08-0070	
V08-0014	V08-0073	V08-0074	V08-0075	V08-0076	DEMIN. PT.
V08-0071	V08-0077	V08-0078	V08-0079	V08-0080	
V08-0072	V08-0081	V08-0082	V08-0083	V08-0084	
V08-0085	V08-0086	V08-0087	V08-0088	V08-0089	
V08-0090	V08-0091	V08-0092	V08-0093	V08-0094	
V08-0095	V08-0096	V08-0097	V08-0098	V08-0099	
V08-0100	V08-0101	V08-0102	V08-0103	V08-0104	
V08-0105	V08-0106	V08-0107	V08-0108	V08-0109	
V08-0120	V08-0122	V08-0124	V08-0126	V08-0128	SJAE ROOM
V08-0121	V08-0123	V08-0125	V08-0127	V08-0129	
V08-0196	V08-0227	V08-0172	V08-0172	V08-0171	
V08-0203	V08-0186	V08-0222	V08-0156	V08-0164	

REF	TANK 1T013(E)	1T013(D)	1T013(C)	1T013(B)	1T013(A)	
PDT 1727( )	V08-0198	V08-0177	V08-0224	V08-0154	V08-0160	
PDIS 1731( )	V08-0191	V08-0187	V08-0214	V08-0155	V08-0163	
PI 1762( )	V08-0192	V08-0175	V08-0222	V08-0228	V08-0157	
PI 1757( )	V08-0193	V08-0178	V08-0220	V08-0206	V08-0159	
PP 1739( )	V08-0197	V08-0180	V08-0221	V08-0207	V08-0162	
PDIS 1731( )	V08-0196	V08-0174	V08-0226	V08-0213	V08-0161	
VENT FOR PDT 1727( )	V08-0199	V08-0182	V08-0219	V08-0210	V08-0165	
FT 1732( )	V08-0201	V08-0184	V08-0215	V08-0211	V08-0167	
	V08-0202	V08-0185	V08-0216	V08-0212	V08-0168	
PDT 1727( )	V08-0200	V08-0183	V08-0218	V08-0208	V08-0166	
VENT FOR CV 1726( )	V08-0188	V08-0181	V08-0217	V08-0209	V08-0237	
AIR TSOL TO CV1724	V08-0194	V08-0173	V08-0238	V08-0236	V08-0158	AIR COMPONENTS
AIR TSOL TO CV1726	V08-0195	V08-0239	V08-0231	V08-0238	V08-0161	
AIR TSOL TO CV1723	V08-0204	V08-0241	V08-0229	V08-0240	V08-0248	
AIR HEADER DRAIN	V08-0205	V08-0247	V08-0246	V08-0245	V08-0244	
AIR HEADER DRAIN	X	X	X	V08-0242	X	
AIR TSOL CV1729	V08-0253	V08-0252	V08-0251	V08-0250	V08-0249	



NOTES:

1. ALL EQUIPMENT SHOWN, TO BE FURNISHED WITH CONDENSATE DEMINERALIZER SYSTEM
2. ALL INSTRUMENTS, DEVICES, CONTROL VALVES AND ANNUNCIATORS MARKED WITH AN ASTERISK(*) FURNISHED BY SELLER.
3. LOCAL CONTROL PANEL TO BE FURNISHED BY SELLER IS DESIGNATED IC008
4. ALL CV'S INCLUDE AIR SUPPLY, 4-WAY SOLENOID VALVE POSITION SWITCHES AND CONTROL SWITCH, CONTROL SWITCH WITH TWO INDICATING LIGHTS TO BE FURNISHED BY SELLER MOUNTED ON LOCAL CONTROL PANEL. (SEE DETAIL)
5. CONDUCTIVITY CELLS ARE LOCATED AT SAMPLE STATION (CONTINUOUSLY FLOWING)
6. ALL CV'S EXCEPT THE INFLUENT AND EFFLUENT VALVES WILL FAIL CLOSED UPON LOSS OF AIR OR ELECTRICAL POWER TO THE VALVE SOLENOID. THE INFLUENT AND EFFLUENT VALVES WILL FAIL IN THE "AS-IS" CONDITION
7. LOSS OF PRIMARY POWER WILL BE ANNUNCIATED ON IC008 AND WILL PLACE EACH ON-LINE FILTER IN "HOLD" PROVIDED AN ACCIDENT HAS NOT OCCURRED.
8. CONDENSATE SERVICE PUMP START SIGNAL APPLIES TO CV1737 ONLY
9. ALL PIPING ON THIS DRAWING IS NON-NUCLEAR ALTHOUGH CERTAIN LINES, WHICH DRAIN TO ATMOSPHERIC RADWASTE TANKS, HAVE A NUCLEAR (B-31.7) CLASS III DESIGNATION.
10. CHECK VALVE INTERNALS REMOVED FROM V08-0037, 0038, 0045, 0046, 0053, 0054, 0061, 0062, 0069 THROUGH 0072, AND 0077 THROUGH 0084. VALVE COVER CAN BE REMOVED FOR CLEANING IF REQUIRED.
11. NEEDLE VALVES IN THE AIR SUPPLY AND RETURN LINES APPLY TO CV1717A-E ONLY
12. APPLIES TO CV1718A-E ONLY
13. 8" CONNECTIONS, (C-2) AND (D-2) ON 24" HEADERS ARE FOR TORUS CLEANUP.
14. FIC1732A,B,C,D & E WERE EACH REPLACED WITH A LOADING STATION. THE REMOTE SETPOINT FOR FIC1732A,B,C,D & E HAS BEEN PLUGGED.

LR NOTES:

1. THE CONDENSATE & DRAIN TANKS 1T013A THRU E AND PORTIONS OF ATTACHED PIPING ARE LOCATED IN COVERED PITS TB195 THROUGH TB199 CONTAINING NO SR EQUIPMENT AND ARE NOT IN SCOPE FOR CRITERION (a)(2)-NSAS.
2. THE CONDENSATE DEMIN INFLUENT & EFFLUENT PIPING AND ISOLATION VALVES LOCATED IN THE SJAE ROOM DO NOT AFFECT SR EQUIPMENT AND ARE NOT IN SCOPE FOR CRITERION (a)(2)-NSAS.
3. ALL EXPOSED DRAIN PIPING AND FUNNELS ARE IN SCOPE FOR LICENSE RENEWAL.

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
  - 37.00 CONDENSATE & DEMINERALIZED WATER
  - 44.00 CONDENSATE AND FEEDWATER
  - 76.00 TURBINE BUILDING SAMPLING

D-016

NO.	DATE	REVISION	DRFTR.	CHK'D.	ENGR.	LEAD
A	9/16/08	INITIAL RELEASE	KB	JVS	TH	CLB

D.A.E.C.
DUANE ARNOLD ENERGY CENTER
P.&I.D. No.

P&ID
CONDENSATE DEMINERALIZER SYSTEM

SCALE:	DWG. NO.	REV.
—	BECH-M108-LR	0

P&ID BASE REV 50