

List of Changed Pages

Page	Revision	Date
3-1	3	6/81
3-27	3	6/31
3-51	3	6/81
3-61	3	6/81
3-77	3	6/81
3-102	3	6/81
3-103	3	6/81

P & ID's

Add P & ID D-170117

### 3.0 INSERVICE TESTING OF VALVES

Table V-1 describes the inservice testing for valves subject to the requirements of Subsection IWV of the 1974 Edition of ASME Section XI with addenda through Summer 1975. The table provides the identification of the valves to be tested, valve code classes, test categories, type, size, test requirements, function, and any alternate testing necessary. Table V-2 provides a legend which describes the alpha coding used in Table V-1. Relief from the testing requirements of Section XI is requested where full compliance with the requirements of the code is not practical. In such cases Table V-1 refers to a specific relief request number for the appropriate valves. The relief request provides specific information which identifies the applicable code requirements, justification for the relief request, and the testing to be used as an alternate. The design of Farley Nuclear Plant does not include any valves which would be classified as ASME Section XI Category D valves. Listed below are the ASME Section XI Category E valves. System operating procedures require recording of the position of these valves before and after valve operation in the plant record and verification that each valve is locked or sealed:

#### ASME SECTION XI CATEGORY E VALVES

Valve(s)	P&ID/Sheet	Function
Q1E11V002A&B	D-175041	RHR pump discharge
Q1E11V043A&B	D-175038/2	RHR discharge header cross-connection
Q1E13V001A&B	D-175038/3	Containment spray header manual isolations
Q1E13V010A&B	D-175038/3	Spray pump recirculation isolations
Q1E13V019A&B	D-175038/3	Additive supply to eductor checks
Q1E13V024	D-175038/3	Spray additive tank outlet
Q1E21V061A,B&C	D-175038/1	BIT to cold leg injection throttle valves
Q1E21V071A,B&C	D-175038/1	Hot leg injection throttle valves
Q1E21V075A,B&C	D-175038/1	Hot leg injection throttle valves
Q1E21V080A,B&C	D-175038/1	Cold leg injection throttle valves
Q1E21V123A,B&C	D-175039/2	Charging pump discharge
Q1E21V182A,B&C	D-175039/2	Charging pump suction
Q1N12V002A&B	D-175033/2	Steam to turbine-driven aux. feedwater pump
Q1N12V005A&B	D-175033/2	Steam to turbine-driven aux. feedwater pump
Q1N12V006A&B	D-175033/2	Steam to turbine-driven aux. feedwater pump
Q1N23V001A-K	D-175007	Aux. feedwater to steam generators
Q1N23V004A&B	D-175007	Aux. feedwater pump suction
Q1N23V005	D-175007	Aux. feedwater pump suction
Q1N23V015A-E	D-175007	Service water to aux. feedwater
Q1N23V016A&B	D-175007	Service water to aux. feedwater
Q1N23V017A-F	D-175007	Aux. feedwater to steam generators
Q1N23V501	D-170117/2	Aux. feedwater pump suction
Q1N23V502	D-170117/2	Aux. feedwater pump suction

Table V-1 Valve Test Program

System Name: HHSI CVCS System

Revision Number: 3

System Number: Q1E21

(Note: See Table V-2 for Legend of Symbols)

Valve Number		Code Class	P&ID/Sh Number	Coordinates	Section XI Valve Category	Size (inches)	Valve Type	Actuator Type	Normal Position	Test Requirements	Test Alternates	Relief Requests	Stroke Time Limit (Sec.)	Function	Remarks
TPNS	Other														
V077A	1-6993A	1	D-175038/1	F-2	AC	6	CK	SA	C	CV	RR	3.1.36	--	HHSI/LHSI and PHR to RC HL Loops 1 & 2	
										LT	--	NO	--		
V077B	1-8993B	1	D-175038/1	G-2	AC	6	CK	SA	C	CV	RR	3.1.36	--	HHSI/LHSI and RHR to RC HL Loops 1 & 2	
										LT	--	NO	--		
V077C	1-8993C	1	D-175038/1	G-1	C	6	CK	SA	C	CV	RR	3.1.2	--	HHSI/LHSI and RHR to RC HL Loop 3	
										--	--	--	--		
V078A	1-8990A	1	D-175038/1	G-3	C	2	CK	SA	C	CV	RR	3.1.2	--	HHSI Pumps Discharge to RC Loops HL	
V078B	1-8990B	1	D-175038/1	G-3	C	2	CK	SA	C	CV	RR	3.1.2	--	HHSI Pumps Discharge to RC Loops HL	
V078C	1-8990C	1	D-175038/1	G-3	C	2	CK	SA	C	CV	RR	3.1.2	--	HHSI Pumps Discharge to RC Loops HL	
V079A	1-8992A	1	D-175033/1	G-3	C	2	CK	SA	C	CV	RR	3.1.2	--	HHSI Pumps Discharge to RC Loops HL	
V079B	1-8992B	1	D-175038/1	G-2	C	2	CK	SA	C	CV	RR	3.1.2	--	HHSI Pumps Discharge to RC Loops HL	
V079C	1-8992C	1	D-175038/1	G-2	C	2	CK	SA	C	CV	RR	3.1.2	--	HHSI Pumps Discharge to RC Loops HL	

Table V-1 Valve Test Program

System Name: Condensate &amp; Feedwater System

Revision Number: 3

System Number: Q1N21/Q1C22

(Note: See Table V-2 for Legend of Symbols)

Valve Number		Code Class	P&ID/Sh Number	Coordinates	Section XI Valve Category	Size (inches)	Valve Type	Actuator Type	Normal Position	Test Requirements	Test Alternates	Relief Requests	Stroke Time Limit (Sec.)	Function	Remarks
TPNS	Other														
V001A	1-MOV3232A	2	D-175073	G-7	C	14	CK	SA	0	CV	CS	3.1.24 3.1.32 3.1.33	--	Main Feedwater to Steam Generator	
										MT	--	NO	30		
V001B	1-MOV3232B	2	D-175073	E-7	C	14	CK	SA	0	CV	CS	3.1.24 3.1.32 3.1.33	--	Main Feedwater to Steam Generator	
										MT	--	NO	30		
V001C	1-MOV3232C	2	D-175073	B-7	C	14	CK	SA	0	CV	CS	3.1.24 3.1.32 3.1.33	--	Main Feedwater to Steam Generator	
										MT	--	NO	30		
FCV478	None	3	D-175073	G-6	B	14	GL	AO	0	Q*	CS	3.1.24	--	Main Feedwater Regulator	
												3.1.32			
												3.1.33			
										MT	--	NO	5		

Table V-1 Valve Test Program

System Name: Containment Purge SystemRevision Number: 3System Number: Q1P13

(Note: See Table V-2 for Legend of Symbols)

Valve Number		Code Class	P&ID/Sh Number	Coordinates	Section XI Valve Category	Size (inches)	Valve Type	Actuator Type	Normal Position	Test Requirements	Test Alternates	Relief Requests	Stroke Time Limit (Sec.)	Function	Remarks
TPNS	Other														
V281	1-HV3198D	2	D-175010/2	F-3	A	48	B	A0	C	Q*	CS	3.1.45 3.1.32 3.1.33	--	Containment Purge Supply	3
										MT	--	NO	5		
										LT	--	NO	--		
V282	1-HV3197	2	D-175010/1	G-9	A	48	B	A0	C	Q*	CS	3.1.45 3.1.32 3.1.33	--	Containment Purge Supply	3
										MT	--	NO	5		
										LT	--	NO	--		
V283	1-HV3196	2	D-175010/1	E-9	A	48	B	A0	C	Q*	CS	3.1.45 3.1.32 3.1.33	--	Containment Purge Exhaust	3
										MT	--	NO	5		
										LT	--	NO	--		
V284	1-HV3198A	2	D-175010/2	D-3	A	48	B	A0	C	Q*	CS	3.1.45 3.1.32 3.1.33	--	Containment Purge Exhaust	3
										MT	--	NO	5		
										LT	--	NO	--		

Table V-1 Valve Test Program

System Name: Instrument Air System

Revision Number: 3

System Number: QIP19

(Note: See Table V-2 for Legend of Symbols)

Valve Number		Code Class	P&ID/Sh Number	Coordinates	Section XI Valve Category	Size (inches)	Valve Type	Actuator Type	Normal Position	Test Requirements	Test Alternates	Relief Requests	Stroke Time Limit (Sec.)	Function	Remarks
TPNS	Other														
V002	None	2	D-175034/3	D-2	AC	2	CK	SA	0	CV	RR	3.1.3	--	Containment Instrument Air Supply	
										LT	--	NO	--		
HV3611	None	2	D-175034/2	E-11	A	2	GL	AO	0	Q*	CS	3.1.21	--	Containment Instrument Air Supply	
												3.1.32			
												3.1.33			
										MT	--	NO	10		
										LT	--	NO	--		
V004 <sup>(1)</sup>	None	2	D-175034/3	--	AC	1/2	CK	SA	C	CV	NT	3.1.29	--	Backup Air Supply to Pressurizer PORVs	
										LT	--	NO	--		
HV2228 <sup>(1)</sup>	None	2	D-175034/3	--	A	3/4	GL	AO	C	Q*	NT	3.1.29	--	Backup Air Supply to Pressurizer PORVs	
										MT	NST	3.1.29	--		
										LT	--	NO	--		

(1) These valves are not yet shown on a P&ID. A temporary sketch is provided on page 3-103. The P&ID's will be revised to reflect these changes on a later date.

Revision 3 6/81

#### 3.1.44.2 Alternate Testing

A partial-stroke test will be accomplished during the quarterly testing of the MDAFW pumps. Acceptance of the pump test will provide assurance that the valve has partially opened. A full-stroke test will be accomplished by providing MDAFW pump design flow to the Steam Generators during cold shutdown. Verification that design flow is reached provides assurance that the valve has opened in order to perform its function.

#### 3.1.45 Test Requirements

Exercise valves for operability at least once every three months.

##### 3.1.45.1 Basis for Relief

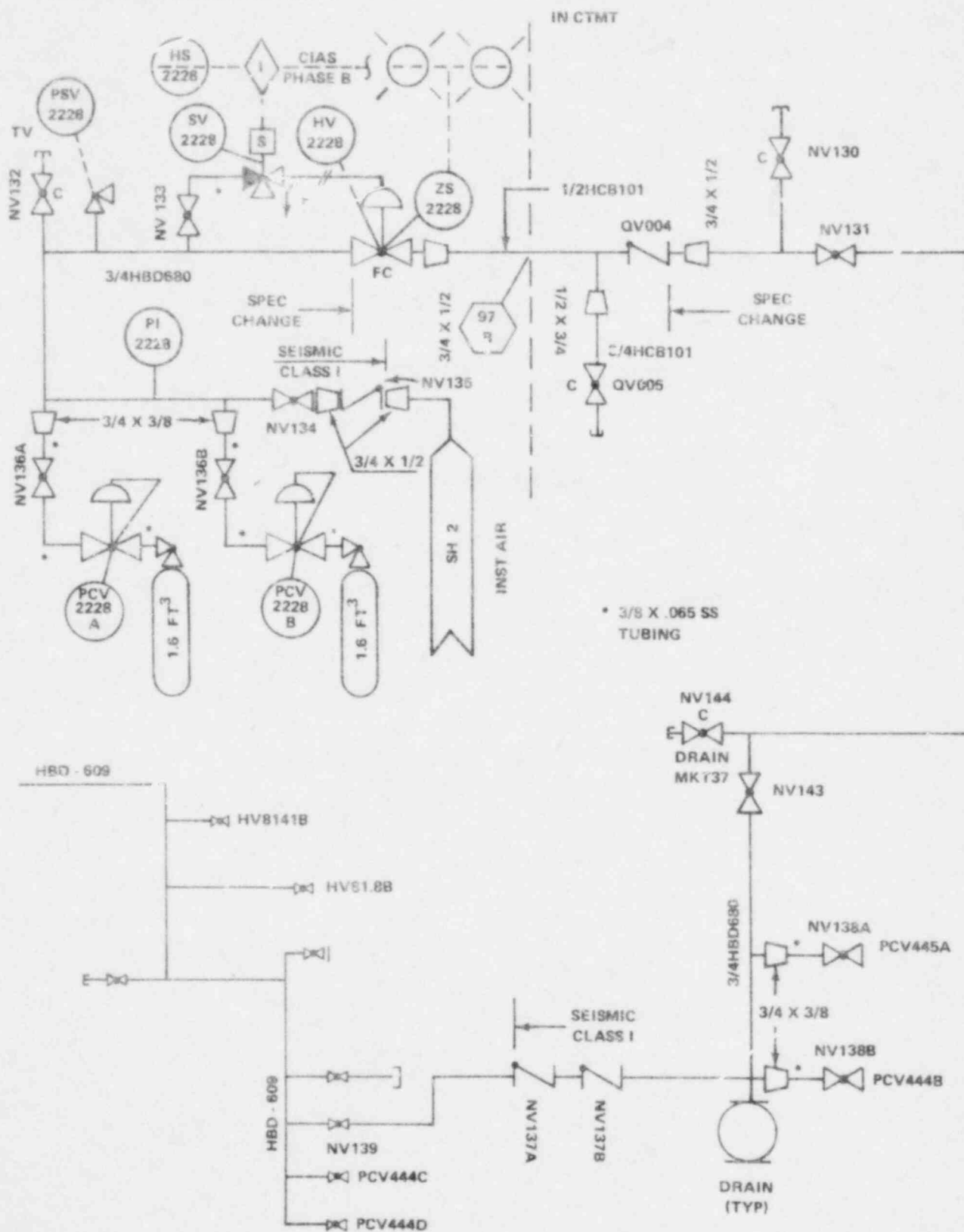
The Nuclear Regulatory Commission requires these Containment Purge supply and exhaust valves to be inoperable in Modes 1 through 4. Inoperability of these valves is maintained per Technical Specification 3.6.3.1. Consequently, no exercising of these valves can occur unless the plant is in Mode 5 (cold shutdown) or Mode 6 (refueling).

##### 3.1.45.2 Alternate Testing

These valves will be full-stroke tested each cold shutdown if the valves have been opened for purging. If no purging has occurred then Technical Specifications 3.9.9, which requires verification of their closed position once every 31 days, will be met.

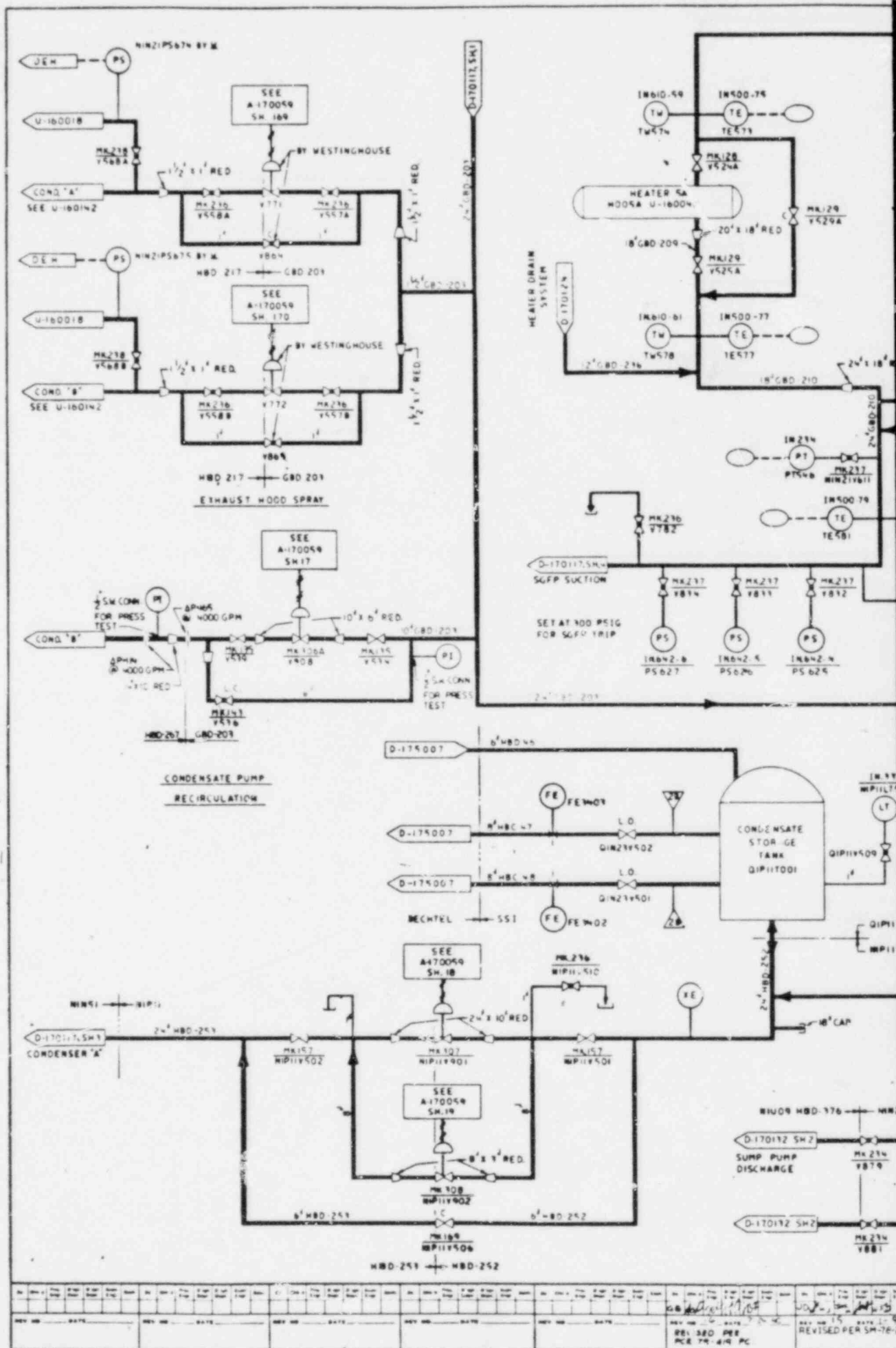


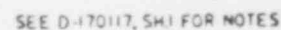
TO REVISE DWG D-175034 AS SHOWN:



5433-1





[illegible]