

SUSQUEHANNA STEAM ELECTRIC STATION

UNIT 2

INSERVICE INSPECTION PROGRAM PLAN

FOR

PUMP AND VALVE OPERATIONAL TESTING

Rev.	Description	Prepared by:	Approved by:	Date
4	Compliance with NRC Generic Letter 89-04	Signatures on File		
5	Responses to NRC Comments	Signatures on File		
6	Addition of Water Level Backfill Valves	Signatures on File		

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SUSQUEHANNA STEAM ELECTRIC STATION
UNIT 2
PUMP AND VALVE INSERVICE INSPECTION
TESTING PROGRAM

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NUCLEAR BOILER VESSEL INSTRUMENTATION M-2142 Sheet 2

Valve Number	ASME Class	P&ID Coordinates	Section XI Valve Category				Active	Passive	Size (in.)	Valve Type	Actuator Type	Remote Position Indicator	Normal Position	Test Requirements	Relief Request Req'd	#	Testing Alternative	Remarks
			A	B	C	D												
242032	S	D-8	X		X		X		3/8	C	-	-	0	CV, LT	YES	69		Closure check only.
242033	S	D-8	X		X		X		3/8	C	-	-	0	CV, LT	YES	69		Closure check only.
242044	S	E-8	X		X		X		3/8	C	-	-	0	CV, LT	YES	69		Closure check only.
242045	S	E-8	X		X		X		3/8	C	-	-	0	CV, LT	YES	69		Closure check only.
242059	S	F-8	X		X		X		3/8	C	-	-	0	CV, LT	YES	69		Closure check only.
242060	S	F-8	X		X		X		3/8	C	-	-	0	CV, LT	YES	69		Closure check only.
242071	S	G-8	X		X		X		3/8	C	-	-	0	CV, LT	YES	69		Closure check only.
242072	S	G-8	X		X		X		3/8	C	-	-	0	CV, LT	YES	69		Closure check only.

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CONTROL ROD DRIVE M-2147 Sheet 2

Valve Number	ASME Class	P&ID Coordinates	Section XI Valve Category				Active	Passive	Size (in.)	Valve Type	Actuator Type	Remote Position Indicator	Normal Position	Test Requirements	Relief Request Req'd	#	Testing Alternative	Remarks
			A	B	C	D												
247114*	2	A-8			X		X	3/4	C	-	-	C	CV	Yes	17	See Relief Request.	Open test only.	
247115*	2	D-8			X		X	1/2	C	-	-	C	CV	Yes	17	See Relief Request.	Closure test only.	
XV-247126*	2	D-6		X			X	1/2	GL	A	-	C	Q	Yes	17	See Relief Request.	Open test only.	
XV-247127*	2	A-6		X			X	1/2	GL	A	-	C	Q	Yes	17	See Relief Request.	Open test only.	
247138*	2	D-4			X		X	1/2	C	-	-	O	CV	Yes	17	See Relief Request.	Closure test only.	

* There are a total of 185 sets of these valves, one for each of the 185 CRD Hydraulic Control Units.

2VT-29

RELIEF REQUEST NUMBER 69

System: Nuclear Boiler Vessel Instrumentation

P&ID: M-2142

Valve: 242032 242044 242059 242071
242033 242045 242060 242072

Category: A

Class: Non-Code Safety Function

Function: Prevent reverse flow out through backfill line.

Impractical Test Requirement: Exercise valves to their closed positions once per 92 days (per IWV-3521).

Basis for Relief: These check valves, located in backfill lines for the reactor water level instrumentation, provide Control Rod Drive Hydraulic System water flow into their respective instrument line reference legs, while preventing flow of instrument line water inventory in the reverse direction. To support the continued integrity of the reactor water level instrumentation during accident conditions, these check valves have been assigned a very small reverse flow leakage limit (0.5 lbm/hr) by PP&L. These check valves have been designed for periodic removal from their system and bench testing of their reverse flow leakage, to facilitate the demonstration that they meet their unusually small leakage limit. Removal of these check valves from the system for exercise testing and leakage testing on a test bench is not practical during periods of plant operation nor during periods of plant cold shutdown because their isolation for removal and testing causes loss of some reactor water level indication in the control room and creates the potential for actuation of Engineered Safety Features (ESF's) associated with each of the instrument lines being isolated. Loss of control room indication of reactor water level on some instruments is acceptable and prevention of unplanned ESF actuations is possible only during refueling outages. Further, removal, testing, and reinstallation of the check valves produces a risk of introducing air into the reference leg piping. As the purpose of this equipment is prevention of gas entrainment in the reference leg piping, removal, testing, and reinstallation of the check valves may be attempted only during refueling outages.

RELIEF REQUEST NUMBER 69 (Cont'd.)

Alternative Testing: Demonstrate closure of each check valve in the reactor water level instrumentation backfill lines and demonstrate reverse flow leakage of each check valve less than its limit once per refueling outage.