

REGULATORY INFORMATION DISTRIBUTION SYSTEM

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SUBJECT:	•	SIZE: 18
Forwards proposed Ar	mend #36 to sub	oj facil Tech Spec, changing definition
of rated pwr, updat:	ing safety rela	ated shock suppressor listing, & correctin
error in listing of	fire detectors	Also forwards check for \$1200.
DISTRIBUTION CODE: DISTRIBUTION TITLE: GENERAL DISTRIBL		NOTARIZED
NAME	ENCL?	FOR ACTION
BR CHIEF REG FILE NRC PDR I & E OELD HANAUER CORE PERFORMANCE BR AD FOR SYS & PROJ ENGINFERING BR REACTOR SAFETY BR PLANT SYSTEMS BR EEB EFFLUENT TREAT SYS J MCGOUGH LPDR TERA NSIC ACRS	WYNER COLLUL LUNCH TYPE COLL OLL CLUNC ENCLUNCY COLL CLU LUNCH COLL CLU LUNCH COLL CLU LUNCH COLL CLU CLU CLU CLU CLU CLU CLU CLU CLU C	• ORB#1 BC

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WISCONSIN PUBLIC SERVICE CORPORATION



P.O. Box 1200, Green Bay, Wisconsin 54305

November 10, 1978

Office of Nuclear Reactor Regulation U. S. Nuclear Regulatory Commission Washington, D. C. 20555

Attention Mr. A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Gentlemen:

Docket 50-305
Operating License DPR-43
Proposed Technical Specification Amendment No. 36
Kewaunee Nuclear Power Plant

Enclosed please find forty (40) copies of our proposed Amendment No. 36 to the Kewaumee Nuclear Power Plant Technical Specifications. We have determined that this Amendment is a Class II type Amendment and, therefore, have enclosed a check for \$1,200 to cover the fee for processing this Amendment.

Part 1 of this Amendment concerns changing the definition of rated power in Section 1 of the Technical Specifications to read "reactor core output of 1650 MWt" rather than "reactor system output of 1650 MWt." This change is consistent with the definition of Maximum Power Level as stated in our Facility Operating License. The original definition was a result of an error made during the development of the original Technical Specifications. Westinghouse has assured us that the evaluations performed on the Kewaunee Plant are consistent in method and power level assumptions employed on other facilities which have reactor core output as the limiting parameter. Also deleted is definition n., Interim Fuel Limits, which applied to Cycle 1 only.

Part 2 of this Amendment concerns updating the safety related shock suppressor listing in Table TS 3.14-1. Our detailed review has found that there are more safety related snubbers than the original table listed, therefore, the number of snubbers tested in the representative annual sample has been increased to maintain the same percentage (10%) as the previous specifications.

78/1/19/196

A02140 A WICHOCK WICHOCK WICHOCK U. S. Nuclear Regulatory Commission November 10, 1978 Page 2

Part 3 of this Amendment corrects an error in the listing of fire detectors, Table TS 3.15-1. Our investigation revealed that the original listing contained several errors. The updated table corrects for these errors. The number of fire detectors in some areas has increased, therefore, the amount of protection afforded has correspondingly increased, and no change in intent has occurred. A typographical error made in Technical Specification TS 4.15 b.4.c. is also being corrected. The designed minimum auto start pressure for the fire water pumps is 100 psig. The jockey pump maintains the fire water system at 120 psig and as a sprinkler or some other load comes on the system the fire water pumps auto start prior to system pressure reading 100 psig. The nominal maintained pressure of the jockey pump was erroneously identified as the minimum auto start pressure for the fire water pumps. The proposed correction will provide the designed function of the fire water pumps and still ensure intended level of protection.

Very truly yours,

E. W. James Senior Vice President

Power Supply & Engineering

snf

Attach.

Subscribed and Sworn to
Before Me This 10 774 Day
of November 1978

Notary Public, State of Wisconsin

My Commission Expires

2-11-79

1. Refueling Operation

Refueling operation is any operation involving movement of Reactor Vessel internal components (those that could affect the reactivity of the core) within the containment when the vessel head is unbolted or removed.

m. Rated Power

Rated power is the steady-state reactor core output of 1650 MWt.

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Table TS 3,14-1 Safety Related Hydraulic Shock Suppressors Page 1 of 11

Steam Supply to Turbine Driven Aux. FN Pump (MS)		System Name		d Hydraulic Shock Suppressors Page 1 of 11 Approximate Location & Elevation	Accessible or Inaccessible (A or I)	Difficult to Remove (X)	High Radiation Area at Shutdown (X)
MS SS-H-73 6'-1 3/4" E of col. (E)		Turbine Driven Aux. FW Pump	SS-H-67	1'-10 3/4" S of col. (9)	A		
O'-O'' of col. (8)		(MS)	SS-H-72	0'-0" of col. (8)	A		
1'-6" S of col. (4)		(MS)	SS-H-73	0'-0" of col. (8)	A		
(MS) SS-H-86		(MS)	SS-H-76	1'-6" S of col. (4)	A		
O'-0" of col. (8) E1. 588'-1" P (MS) SS-H-88 9'-10" E of col. (G) O'-0" of col. (8) E1. 588'-6" A O'-0" N of col. (G) A 3'-0" N of col. (5) E1. 593'-3" (MS) SS-H-129 2'-6" E of col. (GW) O'-0" of col. (6)	$\widehat{}$	(MS)	SS-H-86	0'-0" of col. (8)	A		
(MS) SS-H-103 2'-4" E of col. (G) 3'-0" N of col. (5) E1. 593'-3" (MS) SS-H-129 2'-6" E of col. (GW) O'-0" of col. (6)	11)	(MS)	SS-H-87	0'-0" of col. (8)	A		
(MS) SS-H-103 2'-4" E of col. (G) 3'-0" N of col. (5) E1. 593'-3" (MS) SS-H-129 2'-6" E of col. (GW) O'-0" of col. (6)	Propose	(MS)	SS-H-88	0'-0" of col. (8)	A		
0'-0" of col. (6)		(MS)	SS-H-103	3'-0" N of col. (5)	A		•
		(MS)	SS-H-129	0'-0" of col. (6)	A	X	

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Table TS 3,14-1 Safety Related Hydraulic Shock Suppressors Page 2 of 11

			Page 2 of 11			High Radiation	
	System Name	Snubber I.D. Number	Approximate Location & Elevation	Accessible or Inaccessible (A or I)	Difficult to Remove (X)	Area at Shutdown (X)	
	(MS)	SS-K-146	10'-8" W of col. (K) 2'-5 1/2" S of col. (6) El. 634'- 9 1/2"	Α	X	14.	
٠.	(MS)	SS-H-150	3" N of col. (6s) 1'-11" W of col. (LN) El. 635'-0"	A			
Table IS	Reactor Coolant (RC)	Anchor Holth 900K Custom Suppressors 1 thru 8	Lateral Restraint For Steam Generators (4 on Each)	I	X	X	
S 3.14-1	(RC)	RC-H-29A	0'-3" E of col. (S) 16'-5" S of col. (E) El. 603'-0"	I			
(2 of 11)	(RC)	RC-H-37	Inside Containment SE Quadrant Top of Pressurizer E1. 657'-7"	1			
Proposed	(RC)	RC-H-38	Inside Containment SE Quadrant Bottom of Pressurizer E1. 602'-0"	I			
sed Amendment	(RC)	RC-H-39	Inside Containment SE Quadrant Bottom of Pressurizer E1. 602'-0"	1			
ent Mo.	(RC)	RC-H-40	Inside Containment SE Quadrant Top of Pressurizer E1. 659'-7"	· I			

Table TS 3,14-1 Safety Related Hydraulic Shock Suppressors Page 3: of 11

	System Name	Snubber I.D. Num	3	Approximate Location & Elevation	Accessible or Inaccessible (A or I)	Difficult to Remove	High Radiation Area at Shutdown (X)
	(RC)	RTD-H-2		7'-10" E from center line of steam generator 1A 6'-0" S from center line	I		X
				of steam generator 1A E1. 619'-0"			
	(RC)	RTD-H-6		15'-3 1/2" E from center line of steam generator 1A 11'-9" S from center line	I .		
Table				of steam generator 1A E1. 615'-3 3/16"			
TS	(RC)	RTD-H-8		9'-10" N of center line of steam generator 1B 10'-9" W of center line	I		X
3.14-1 (3				of steam generator 1B E1. 616'-0"			
(3 of 11)	(RĈ)	RTD-H-11		6'-2" N from center line of steam generator 1B 6'-3" W from center line of steam generator 1B E1. 616'-10 1/4"	I		X
Proposed 11/10/78	Residual Heat Removal (RHR)	RHR-H-10H		20'-9" N of col. (6) 21'-0" E of col. (K) E1. 601'-0"	ı		X
ed Amendmen 78	(RHR)	RHR-H-12A		8'-9 1/2" N of col. (6) 25'-2" E of col. (K) El. 626'-6"	I		X

Table TS 3.14-1
Safety Related Hydraulic Shock Suppressors
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High

	System Name	Snubber I.D. N	lumber	Approximate Location & Elevation	Accessible or Inaccessible (A or I)	Difficult to Remove (X)	Radiation Area at Shutdown (X)
	(RHR)	RHR-H-12B		9'-7 1/2" N of col. (6) 25'-2" E of col. (K) El. 626'-6"	I		X
	(RHR)	R-RHR-H-14		36'-1" N of col. (W) 18'-6 5/8" E of col. (N) El. 607'-6", inside containment			
Table TS 3	(RHR)	R-RHR-H-15		36'-0 3/8" N of col. (W) 18'-6 5/8" E of col. (N) El. 607'-6", inside containment			
3.14-1 (4	(RHR)	RHR-H-16A		5'-2 1/2" N of col. (6) 12'-8 1/2" E of col. (K) E1. 617'-9"	ı ı	x	X
of 11)	(RHR)	R-RHR-H-18		27'-2 7/16" N of col. (E) 23'-4 7/16" E of col. (N) E1. 611'-0", inside containment	I		X —
Proposed 11/10/78	(RHR)	RHR-H-21A		14'-6" N of col. (6) 24'-7" E of col. (K) E1. 598'-6"	I .		
d Amendr 18	(RHR)	RHR-H-35A		14'-3 1/2" N of col. (6) 5'-4" E of col. (K) El. 575'-0"	A		X

Table TS 3,14-1
Safety Related Hydraulic Shock Suppressors
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System Name	Snubber I.D. Number	Page 5 of 11 Approximate Location & Elevation	Accessible or Inaccessible (A or I)	Difficult to Remove (X)	High Radiation Area at Shutdown (X)
Residual Heat Removal (RHR)	RHR-H-36A	5'-0" S of col. (6N) 15'-0" E of col. (K) El. 576'-6"	Α		X
(RHR)	RHR-H-38A	14'-3 1/2" N of col. (6) 19'-3" E of col. (K) El. 576'-6"	A		X
(RHR)	RHR-H-41A	7'-5" N of col. (6) 17'-11 5/8" E of col. (K) E1. 576'-6"	A		X
(RHR)	RHR-H-49	20'-9" N of col. (6) 22'-1" E of col. (K) E1. 601'-6"	τ		X
(RHR)	R-RHR-H-55	31'-10" N of col. (W) 12'-7" E of col. (N) E1. 598'-1", inside containment			
(RHR)	R-RHR-H-57	29'-0" N of col. (W) 8'-11" E of col. (N) E1. 592'-0", inside containment	I		
Aux. Feedwater Pump Turbine Driven Exhaust	FWP-H-14	11'-2" S of col. (9) 2'-10 1/2" W of col. (E) El. 600'-1"	A .		

Table TS 3.14-1 Safety Related Hydraulic Shock Suppressors Page 6 of 11

	System Name	Safety Rela	Approximate Location & Elevation	Accessible or Inaccessible (A or I)	Difficult to Remove (X)	High Radiation Area at Shutdown (X)
	S.G. Blowdown (SGB)	SGB-H-137	Inside Containment NW Quadrant E1. 592'-0"	I		
÷	Safety Injection (SI)	SI-H-6D	3'-0" S of col. (6) 1'-6" W of col. (HW) E1. 629'-11 3/4"	A		X .
Table	(SI)	SI-H-35	2'-0" N of col. (6) 15'-11 3/8" E of col. (K) E1. 606'-9"	ĭ		
TS 3.14-1	(SI)	RSI-H-2	46'-11 1/2" N of col. (W) 16'-5 3/8" E of col. (N) E1. 606'-6"	I		:
-1 (6.of	(SI)	RSI-H-2A	46'-11 1/2" N of col, (W) 16'-5 3/8" E of col, (N) E1. 607'-0"	I		
11)	(SI)	RSI-H-15A	1'-6" N of col. (W) 22'-2" W of col, (N) E1. 602'-2"	I		
Proposed 1:1/10/78	(SI)	RSI-H-38	31'-2 3/4" N of col. (E) 3'-5 1/2" E of col. (N) E1. 607'-5"	I		
ed Amendment 78	(SI)	RSI-H-59	13'-4 5/8" N of col. (E) 34'-3 3/4" E of col. (N) E1. 621'-8 1/4"	I	X	
nent No.	(SI)	RSI-H-61	10'-6" N of col. (E) 36'-9 7/8" E of col. (N) E1. 593'-6"	I		

Table TS 3.14-1 Safety Related Hydraulic Shock Suppressors Page 7 of 11

	Sarety R	Page 7 of 11			High
System Name	Snubber I.D. Number	Approximate Location & Elevation	Accessible or Inaccessible (A or I)	Difficult to Remove (X)	Radiation Area at Shutdown (X)
(SI)	RSI-H-63	36'-9 7/8" E of col. (N) 2'-10 7/8" S of col. (E) E1. 593'-6"	I		
(SI)	RSI-H-67	10'-8 7/8" S of col. (E) 23'-9 1/4" E of col. (N) E1. 603'-7"	I		
(SI)	RSI-H-78	34'-7 1/4" N of col. (W) 15'-9 1/2" E of col. (N) E1. 601'-3"	I .		
(SI)	RSI-H-83	17'-5" N of col. (W) 0'-5 3/4" E of col. (N) E1. 601'-0"	Ι		X
(SI)	RSI-H-94	Inside Containment NE Quadrant E1. 620'-5"	I .	X	
(SI)	RSI-H-95	Inside Comtainment NE Quadrant El. 614'-0"	I	x	
(SI)	RSI-H-96	Inside Containment NE Quadrant El. 614'-5"	.	x	
(SI)	RSI-H-97	Inside Containment NE Ouadrant E1. 630'-2"			
(SI)	RSI-H-98	Inside Containment NE Quadrant E1. 607'-0"	I		

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Table TS 3.14-1 Safety Related Hydraulic Shock Suppressors Page 8 of 11

System Name	Snubber I.D. Number	Page 8 of 11 Approximate Location & Elevation	Accessible or Inaccessible (A or I)	Difficult to Remove (X)	High Radiation Area at Shutdown (X)
(SI)	RSI-H-99	Inside Containment NE Quadrant E1. 599'-6"	I		
(SI)	RSI-H-100	Inside Containment NW Quadrant E1. 599'-6"	I		
(SI)	RSI-H-101	Inside Containment NE Quadrant E1. 599'-6"	I		
(SI)	RSI-H-102	Inside Containment NE Quadrant E1. 607'-0"	I		
Aux. Coolant (AC)	RAC-H-21	39'-9 3/4" N of col. (E) 8'-8 1/16" E of col. (N) El. 600'-8 1/4"	Ι		
(ÄC)	RAC-H-37	9'-4 5/16" S of col. (W) 34'-1 9/16" W of col. (S) E1. 599'-8 1/4"	I .		
(AC)	RAC-H-38	9'4 5/16" S of col. (W) 34'-1 9/16" W of col. (S) E1. 598'-10"	ī		
(AC)	RAC-H-39	9'-4 5/16" S of col. (W) 34'-1 9/16" W of col. (S) E1. 599'-8 1/4"	ı		

Table TS 3,14-1 Safety Related Hydraulic Shock Suppressors Page 9 of 11

			Page 9 of 11	Accessible or	Difficult	High Radiation Area at
	System Name	Snubber I.D. Number	Approximate Location & Elevation	Inaccessible (A or I)	to Remove (X)	Shutdown (X)
	(AC)	RAC−H−75	36'-0" N of col. (W) 1'-9 5/8" E of col. (N) El. 601'-8 1/4"	I .		
	(AC)	RAC-H-76 (NE) RAC-H-76 (SE)	6'-6" N of col. (W) 24'-5 5/8" W of col. (N) El, 601'-8 1/4"	I I		
Table TS	(AC)	AC-H-68	15'-1" E of col. (K) 6'-6" S of col. (9) E1. 615'-6 3/4"	A		
Te 3 1/.	(ÅC)	AC-H-78	4'-0" N of col. (6) 15'-0" W of col. (J) El. 615'-1"	A		
-1 (9 of 1	Service Water (SW)	SW-H-401	13'-3" E of col. (K) 13'-0" S of col. (9) E1. 601'-0"	A		
1) Pro	Containment Spray (ICS)	ICS-H-7	13'-3 5/16" E of col, (N) 47'-10" N of center line of containment vessel E1. 626'-8"	I		•
Proposed Amen	(ICS)	ICS-H-8	13'-8 5/16" E of col. (N) 47'-10" N of center line of containment vessel E1. 627'-10"			

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Table TS 3.14-1
Safety Related Hydraulic Shock Suppressors
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			Accessible or	Difficult	Radiation Area at
System Name	Snubber I.D. Number	Approximate Location & Elevation	Inaccessible (A or I)	to Remove	Shuţdown (X)
(ICS)	ICS-H-9	8'-7 1/8" E of col. (N) 52'-2" N of col. (E) El. 649'-6"	ı ı		
(ICS)	ICS-H-10	49'-6" R from center line of containment vessel 8'-7 1/8" N of col. (E) El. 626'-8"	I		
Z (ICS)	ICS-H-11	49'-6" R from center line of containment vessel 8'-7 1/8" N of col. (E) E1. 627'-0"	I		
(ICS)	ICS-H-12	52'-1 7/8" R from center line of containment vessel 9'-0 5/8" N from center line of containment vessel E1. 649'-6"	I		
Chemical volume Control (CVC)	RCVC-H-31A RCVC-H-31B	. Inside Containment NW Quadrant E1. 600'-1"	I I		X X
(cvc)	RCVC-H-32	Inside Containment NE Quadrant E1. 607'-4"			
(CVC)	RCVC-H-33A RCVC-H-33B	Inside containment NV Quadrant El. 600'-0"	I I		X X

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System Name	Snubber I.D. Number	Page 11 of 11 Approximate Location & Elevation	Accessible or Inaccessible (A or I)	Difficult to Remove (X)	High Radiation Area at Shutdown (X)
(ČVC)	RCVC-H-34	Inside Containment NW Quadrant E1. 600'-0"	I		X
(CŸC)	RCVC-H-35	Inside Containment NW Quadrant E1. 626'-0"	I .		X
(CVC)	RCVC-H-36	Inside Containment Pen. 13 N E1. 612'-0"	Ι		
(CVC)	CVC-H-84	4'-9" N of col. (6) 5'-0" E of col. (J) E1. 606'-7 7/8"	A		
(CVC)	CVC-H-96	1'-10" N of col. (6) 7'-0" E of col. (HW) E1. 597'-0"	A		
Containment Spray (ICS)	CS-H-33A	11'-0" N of col. (4) 7'-0" W of col. (H) E1. 607'-0"	A		

TABLE TS 3.15-1

FIRE DETECTION INSTRUMENTATION

	Fire Area		# of Detectors	Minimum # Required	Operators Actions
Table 'TS 3,15-1	AX-21	4160 Switchgear Room	3	2	Establish an hourly fire watch inspection
	AX-23	Special Vent Rooms	9 	9	If special ventilation is operating with charcoal filters in service establish an hourly fire watch inspection. If not in service establish a 4-hour inspection frequency.
	AX-24	Fuel Handling Area	3	3	Establish an hourly fire watch inspection
	AX-30	Relay Room	19	6	Establish an hourly fire watch inspection
	AX-32	Cable run area	11	8	Establish an hourly fire watch inspection
	AX-35	Control Room	13	0	Control room is continuously manned
	AX-37	CRD Room	7	4	Establish an hourly fire watch inspection
				<u></u>	
Pr99898 Amendment No. 36	SB-65	Shield Building	6	2	Establish a four hour fire watch inspection
	SC-70	Screen House	3	2	Establish an hourly fire watch inspection
	TU-90/91	D/G 1A and day tank room	7	5 N	Establish an hourly fire watch inspection
	TU-92/93	D/G 1B and day tank room	7	5	Establish an hourly fire watch inspection
	TU 95	Air Compressor & Pump Room	4	4	Establish an hourly fire watch inspection
	TU 97	Battery Room 1A	1	1	Establish an hourly fire watch inspection
	TU 98	Battery Room 1B	1	1	Establish an hourly fire watch inspection

^{*} No two adjacent detectors can be out of service

All hydraulic shock suppressors whose seal materials are other than ethylene propylene or other material that has been demonstrated to be compatible with the operating environment shall be visually inspected for operability every 31 days.

Shock suppressors are categorized as "accessible" or "inaccessible" as noted on Table TS 3.14-1. For the purpose of this inspection these two groups may be considered independently and scheduled accordingly.

- b. A representative sample of nine shock suppressors or 10% of the total shall be functionally tested for operability including verification of proper piston movement, lockup, and bleed at each refueling. For each shock suppressor or subsequent shock suppressor found inoperable by this testing requirement, an additional 10% or nine hydraulic shock suppressors shall be tested until no more failures are found or all shock suppressors have been tested. Those shock suppressors designated to be difficult to remove or in a high radiation area during shutdown as noted on Table TS 3.14-1 need not be selected for functional testing. The Anchor Holth suppressors used on the steam generators are exempt from functional testing requirements.
- c. The initial inspection shall be performed at the cycle 3 refueling. For the purpose of entering the schedule in Specification 4.14.a, it shall be assumed that the facility had been on a 12 month inspection interval.

Basis

All safety related hydraulic shock suppressors are visually inspected for overall integrity and operability. The inspection will include verification of proper orientation, adequate hydraulic fluid level and proper attachment of snubber to piping and structures.

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To further increase the assurance of snubber reliability, functional tests should be performed once each refueling cycle. These tests will include stroking of the snubbers to verify proper piston movement and snubbing action. Ten percent or nine snubbers, represents an adequate smaple for such tests. Observed failures on these samples should require testing of additional units. The Anchor Holth suppressors used on the steam generators are exempt from the functional test requirement due to the impracticability of functionally testing 900 Kip suppressors.

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- c) Verifying that each high pressure pump auto-start setpoint is >100 psig.
- 5. At least once per 3 years by performing a flow test of the system in accordance with the section titled "Flow Test of Public Main at Plant Site" in Chapter 5, Section 11 of the Fire Protection Handbook, 14th Edition, published by the National Fire Protection Association.

c. Spray/Sprinkler Systems

Each of the spray and/or sprinkler systems in Specification 3.15.c shall be demonstrated OPERABLE:

- 1. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.
- 2. At least once per 18 months:
 - a) By performing a system functional test which includes simulated automatic actuation of the system, and:
 - 1. Verifying that the automatic valves in the flow path actuate to their correct positions, and
 - Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel.
 - b) By visual inspection of the spray headers to verify their integrity, and
 - c) By visual inspection of each nozzle to verify no blockage.
- 3. At least once per three years by performing an air flow test through each open head spray/sprinkler header and verifying each open head spray/sprinkler nozzle is unobstructed.

d. Low Pressure CO₂ Systems

Each of the low pressure CO_2 systems in Specification 3.15.d shall be demonstrated OPERABLE:

- 1. At least once per 7 days by verifying CO_2 storage tank level and pressure, and
- 2. At least once per 18 months by verifying:
 - a) The system valves and associated ventilation dampers actuate manually and automatically, upon receipt of a simulated actuation signal, and