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 AUTH. NAME AUTHOR AFFILIATION
 ZIMMERMAN, S. R. Carolina Power & Light Co.
 RECIP. NAME RECIPIENT AFFILIATION
 DENTON, H. R. Office of Nuclear Reactor Regulation, Director (post 851125)

SUBJECT: Forwards draft revs to FSAR Tables 3.9.3-13 & 14, per SSER 3 (NUREG-1038), Section 3.10.1, "Operability Qualification of Mechanical Equipment." Two new columns (methodology & notes) added to tables.

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NOTES: Application for permit renewal filed. 05000400

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1. The purpose of this document is to provide a comprehensive overview of the current status of the project. It is intended for the use of management and other stakeholders who are interested in the progress of the project.

2. The project has been initiated and is currently in the planning phase. The initial objectives and goals have been established, and the necessary resources have been allocated.

3. The project is expected to be completed by the end of the fiscal year. It is anticipated that the project will result in significant improvements in the organization's performance.

Item	Description	Quantity	Unit Price	Total Price
1	Material A	100	\$5.00	\$500.00
2	Material B	200	\$3.00	\$600.00
3	Material C	50	\$10.00	\$500.00
4	Material D	150	\$4.00	\$600.00
5	Material E	300	\$2.00	\$600.00
6	Material F	100	\$8.00	\$800.00
7	Material G	250	\$3.50	\$875.00
8	Material H	75	\$12.00	\$900.00
9	Material I	120	\$7.50	\$900.00
10	Material J	180	\$5.00	\$900.00

4. The project is currently on track and is expected to be completed on time. It is anticipated that the project will result in significant improvements in the organization's performance.

5. The project is currently on track and is expected to be completed on time. It is anticipated that the project will result in significant improvements in the organization's performance.

6. The project is currently on track and is expected to be completed on time. It is anticipated that the project will result in significant improvements in the organization's performance.



Carolina Power & Light Company

SERIAL: NLS-86-220

JUN 12 1986

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
United States Nuclear Regulatory Commission
Washington, DC 20555

SHEARON HARRIS NUCLEAR POWER PLANT
UNIT NO. 1 - DOCKET NO. 50-400
PUMP AND VALVE OPERABILITY REVIEW

Dear Mr. Denton:

Carolina Power & Light Company hereby submits draft revisions to Shearon Harris FSAR Tables 3.9.3-13 and 14 (list of active valves). The staff requested this information in Safety Evaluation Report, NUREG-1038, Supplement No. 3, Section 3.10.1, *Operability Qualification of Mechanical Equipment*, as part of the pump and valve operability review. We will docket a final list prior to fuel load.

Two new columns (Methodology and Notes) have been added to the tables in response to the staff's request that safety-related NSSS and BOP valves qualified by analysis only be identified. These new columns provide specific information regarding the qualification of each valve. Also included are two pages with definitions of the notes used in the columns.

The two new columns are included in the attachment to this letter to assist the staff in resolving this confirmatory issue, but will not be included in the FSAR amendment.

If you have any questions, please contact Mr. Pedro Salas at (919) 836-8015.

Yours very truly,

S. R. Zimmerman
Manager

Nuclear Licensing Section

PS/pgp (3971PSA)

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Notes to Tables 3.9.3-13 and 3.9.3-14

- 1) A* indicates analysis of static conditions. A' designates analyzed to tested valve. T designates tested.
- 2) The test valve is identical to the tested valve.
- 3) The subject and tested valves are identical except for body min wall. The tested valve covers the subject valve because the difference in min wall is insignificant.
- 4) The subject and tested valves are identical except for body material. The tested valve covers the subject valve because the difference in body materials has insignificant impact.
- 5) Subject and tested valves identical except body size which is addressed and justified in EQ report.
- 6) Based on material, size, and pressure class, the tested valve covers the subject valve.
- 7) Subject and tested valve are identical except for port size.
- 8) The only difference between the subject valve and the tested valves is the motor insulation type.
- 9) Operability testing is not required on check valve.
- 10) Valve analysis only. Justification accepted by NRC. See SER NUREG-1038, Supplement 3, Section 3.10.1.2.
- 11) Seismic Deflections of the subject valve were also determined analytically and shown not to affect operability.
- 12) Combination test and analysis. Actuator and accessories qualified by test. Assembly analyzed.
- 13) Valve 1CS-L500SN, 3" globe valve, tested by Westinghouse.
- 14) Valve 2CS-V605SA, 4" gate valve, tested by Westinghouse.
- 15) Crosby relief valve 1RC-528SN, 6" relief valve, actually tested by Westinghouse.
- 16) Valve 2CS-V600SB, 2" globe valve, tested by Westinghouse.
- 17) Natural frequency test of assembly performed.
- 18) Valve 2CS-V511SA, 2" globe valve, tested by Westinghouse.
- 19) Valve 3CC-B6SA, 18" butterfly valve tested by CP&L.
- 20) Valve 1RH-V503SB, 12" gate valve tested by Westinghouse.

21) Hand operated, NDT required to be tested.

22) Based on material, size, and pressure class, the tested valve covers the subject valve.

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TABLE 3.9.3-13

NSSS SUPPLIED ACTIVE CLASS 1, 2, AND 3 VALVES

<u>Ebasco Tag Number</u>	<u>Westinghouse Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Environmental Qualification</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>System Design Rating</u>	<u>System Operating Conditions</u>	<u>Size</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
1RC-R528SN 529 530	1-8010A,B,C	RC	RCB	-	Relief	Self- actuated	Crosby	1	1500	2485 psig 589 F	6	Pressurized Safety	T	2
2RC-V525SB	1-8046	RC	RCB	-	Check	ΔP	Westinghouse	2	150	3 psig 120 F	3	Containment Isolation	N/A	9
2RC-D525SB	1-8028	RC	RAB	(6)	Diaphragm	Air	Grinnell	2	150	3 psig 120 F	3	Containment Isolation	A ¹	6
2RC-D528SA-1	1-8047	RC	RCB	-	Diaphragm	Air	Grinnell	2	150	3 psig 120 F	1	Containment Isolation	A ¹	6
2RC-D529SB-1	1-8033	RC	RCB	-	Diaphragm	Air	Grinnell	2	150	3 psig 120 F	1	Containment Isolation	A ¹	6
2CS-V516SA	1-8112	CS	RCB	(1)	Globe	Motor	Velan	2	1500	150 psig 200 F	2	Containment Isolation	A ¹	8
2CS-V517SB	1-8100	CS	RAB	(6)	Globe	Motor	Velan	2	1500	150 psig 200 F	2	Containment Isolation	T	2
1CS-V505SN	1-8378	CS	RCB	-	Check	ΔP	Westinghouse	1	1500	2435 psig 560 F	3	RCS Press. Bound. Isol.	N/A	9
1CS-V506SN	1-8379	CS	RCB	-	Check	ΔP	Westinghouse	1	1500	2435 psig 560 F	3	RCS Press. Bound. Isol.	N/A	9

3.9.3-23

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TABLE 3.9.3-13 (Cont'd)

NSSS SUPPLIED ACTIVE CLASS 1, 2, AND 3 VALVES

<u>Ebasco Tag Number</u>	<u>Westinghouse Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Environmental Qualification</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>System Design Rating</u>	<u>System Operating Conditions</u>	<u>Size</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
1CS-V504SN	1-8347	CS	RCB	-	Check	ΔP	Westinghouse	1	1500	2435 psig 560 F		RCS Press. Bound. Isol.	N/A	9
1CS-V507SN	1-8346	CS	RCB	-	Check	ΔP	Westinghouse	1	1500	2435 psig 560 F	3	RCS Press. Bound. Isol.	N/A	9
1CS-L500SN	1-LCV-460	CS	RCB	(2)	Globe	Air	Copes Vulcan	1	1500	2485 psig 589 F	3	RCS Press. Bound. Isol.	T	2
1CS-L501SN	1-LCV-459	CS	RCB	(2)	Globe	Air	Copes Vulcan	1	1500	2485 psig 589 F	3	RCS Press. Bound. Isol.	T	2
2CS-V515SN	1-8381	CS	RCB	-	Check	ΔP	Westinghouse	2	1500	2340 psig 130 F	3	Containment Isolation	N/A	9
2CS-V610SA	1-8107	CS	RAB	(6)	Gate	Motor	Westinghouse	2	1500	2670 psig 170 F	3	Containment Isolation	A'	6
2CS-V518SB	1-8152	CS	RAB	(6)	Globe	Air	Copes Vulcan	2	600	600 psig 382 F	3	Containment Isolation	A'	3
2CS-V609SB	1-8108	CS	RAB	(6)	Gate	Motor	Westinghouse	2	1500	2670 psig 170 F	3	ECCS Operation	A'	6
1CS-V510SB-1	1-8153	CS	RCB	-	Globe	Air	Copes Vulcan	1	1500	2485 psig 589 F	1	ESF	A'	3
1CS-V509SB-1	1-8154	CS	RCB	-	Globe	Air	Copes Vulcan	1	1500	2485 psig 589 F	1	ESF	A'	3

3.9.3-24

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TABLE 3.9.3-13 (Cont'd)

NSSS SUPPLIED ACTIVE CLASS 1, 2, AND 3 VALVES

<u>Ebasco Tag Number</u>	<u>Westinghouse Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Environmental Qualification</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>System Design Rating</u>	<u>System Operating Conditions</u>	<u>Size</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
2CS-V585SA	1-8106	CS	RAB	(6)	Gate	Motor	Westinghouse	2	1500	2350 psig 130 F	3	ECCS Operation	A ¹	6
2CS-V612SA	1-8926	CS	RAB	-	Check	ΔP	Westinghouse	2	150	220 psig 200 F	8	ECCS Operation	N/A	9
2CS-V605SA V606SB	1-8133A,B	CS	RAB	(6)	Gate	Motor	Westinghouse	2	1500	2670 psig 170 F	4	ECCS Operation	T	2
2CS-V603SA V604SB	1-8132A,B	CS	RAB	(6)	Gate	Motor	Westinghouse	2	1500	2670 psig 170 F	4	ECCS Operation	T	2
2CS-V594SA V596SB V595SAB	1-8481A,B,C	CS	RAB	-	Check	ΔP	Westinghouse	2	1500	2670 psig 170 F	3	ECCS Operation	N/A	9
2CS-V600SB V602SB V601SAB	1-8109A,B,C	CS	RAB	(6)	Globe	Motor	Velan	2	1500	2350 psig 130 F	2	ECCS Operation	T	2
2CS-V589SA V590SB	1-8131A,B	CS	RAB	(6)	Gate	Motor	Westinghouse	2	150	15 psig 115 F	8	ECCS Operation	A ¹	6
2CS-V587SA V588SB	1-8130A,B	CS	RAB	(6)	Gate	Motor	Westinghouse	2	150	15 psig 115 F	8	ECCS Operation	A ¹	6
2CS-L520SA-1 L521SB-1	1-LCV-115C,E	CS	RAB	(6)	Gate	Motor	Westinghouse	2	150	75 psig 250 F	4	ECCS Operation	A ¹	6
2CS-V583SN	1-8440	CS	RAB	-	Check	ΔP	Westinghouse	2	150	15 psig 115 F	4	ECCS Operation	N/A	9
2CS-L523SA-1 L522SB-1	1-LCV-115B,D	CS	RAB	(6)	Gate	Motor	Westinghouse	2	150	15 psig 115 F	8	ECCS Operation	A ¹	6

3.9.3-25

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TABLE 3.9.3-13 (Cont'd)

NSSS SUPPLIED ACTIVE CLASS 1, 2, AND 3 VALVES

<u>Ebasco Tag Number</u>	<u>Westinghouse Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Environmental Qualification</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>System Design Rating</u>	<u>System Operating Conditions</u>	<u>Size</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
2CS-V586SB	1-8104	CS	RAB	(6)	Globe	Motor	Velan	2	1500	15 psig 150 F	2	Safe Shutdown	T	2
2CS-V511SA V512SA V513SA	1-8149A,B,C	CS	RCB	(2)	Globe	Air	Copes Vulcan	2	1500	600 psig 382 F	2	Containment Isolation	T	2
1RH-V503SB	1-8701A	RH	RCB	(1)	Gate	Motor	Westinghouse	1	1500	2235 psig 620 F	12	Containment Isolation	A ¹	6
1RH-V502SA	1-8702A	RH	RCB	(1)	Gate	Motor	Westinghouse	1	1500	2235 psig 620 F	12	Containment Isolation	A ¹	6
1RH-V501SB	1-8701B	RH	RCB	(1)	Gate	Motor	Westinghouse	1	1500	2235 psig 620 F	12	Containment Isolation	A ¹	6
1RH-V500SB	1-8702B	RH	RCB	(1)	Gate	Motor	Westinghouse	1	1500	2235 psig 620 F	12	Containment Isolation	A ¹	6
2CS-R557SN	1-8492A	CS	RAB	-	Relief	Self- actuated	Westinghouse	2	2500	2712 psig 130 F	2½x1½	System Over Pressure Protection	A ¹	15
2CS-R558SN	1-8492B	CS	RAB	-	Relief	Self- actuated	Westinghouse	2	2500	2712 psig 130 F	2½x1½	System Over Pressure Protection	A ¹	15

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TABLE 3.9.3-13 (Cont'd)

NSSS SUPPLIED ACTIVE CLASS 1, 2, AND 3 VALVES

<u>Ebasco Tag Number</u>	<u>Westinghouse Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Environmental Qualification</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>System Design Rating</u>	<u>System Operating Conditions</u>	<u>Size</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
2CS-V522SB-1	1-8102A	CS	RAB	-	Globe	Motor	Velan	2	1500	2340 psig 130 F	1½	Containment Isolation	A ¹	12, 7
2CS-V523SB-1	1-8102B	CS	RAB	-	Globe	Motor	Velan	2	1500	2340 psig 130 F	1½	Containment Isolation	A ¹	12, 7
2CS-V524SB-1	1-8102C	CS	RAB	-	Globe	Motor	Velan	2	1500	2340 psig 130 F	1½	Containment Isolation	A ¹	12, 7
2RH-V509SA V508SB	1-8716A,B	RH	RAB	-	Check	ΔP	Westinghouse	2	300	600 psig 350 F	10	ECCS Operation	N/A	9
2RH-V506SB	1-8706B	RH	RAB	-	Gate	Motor	Westinghouse	2	300	600 psig 350 F	8	Accident Mitigation	A ¹	12, 22
2RH-V507SA	1-8706A	RH	RAB	-	Gate	Motor	Westinghouse	2	300	600 psig 350 F	8	Accident Mitigation	A ¹	12, 22
1SI-V507SA V508SB V509SA	1-8998A,B,C	SI	RCB	-	Check	ΔP	Westinghouse	1	1500	2485 psig 350 F	6	ECCS Operation	N/A	9
2SI-V506SA V505SB	1-8801A,B	SI	RAB	(6)	Gate	Motor	Westinghouse	2	1500	2635 psig 300 F	3	ECCS Operation	A ¹	6
2SI-V503SA V504SB	1-8803A,B	SI	RAB	(6)	Gate	Motor	Westinghouse	2	1500	2635 psig 300 F	3	ECCS Operation	A ¹	6
2SI-V502SA	1-8885	SI	RAB	(6)	Gate	Motor	Westinghouse	2	1500	2635 psig 300 F	3	ECCS Operation	A ¹	6

3.9.3-27

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TABLE 3.9.3-13 (Cont'd)

NSSS SUPPLIED ACTIVE CLASS 1, 2, AND 3 VALVES

Ebasco Tag Number	Westinghouse Tag Number	System	Location	Environmental Qualification	Type	Operator	Manufacturer	Safety Class	System Design Rating	System Operating Conditions	Size	Function	Methodology ⁽¹⁾	Notes
2SI-V501SB	1-8886	SI	RAB	(6)	Gate	Motor	Westinghouse	2	1500	2635 psig 300 F	3	ECCS Operation	A ¹	6
2SI-V500SA	1-8884	SI	RAB	(6)	Gate	Motor	Westinghouse	2	1500	2635 psig 300 F	3	ECCS Operation	A ¹	6
2SI-V554SB	1-8860	SI	RCB	-	Diaphragm	Air	Copes Vulcan	2	1500	660 psig 120 F	1	Containment Isolation	T	2
2SI-V555SA	1-8871	SI	RCB	-	Diaphragm	Air	Copes Vulcan	2	1500	2485 psig AMB F	3/4	Containment Isolation	A ¹	6
2SI-V530SB	1-8880	SI	RCB	-	Diaphragm	Air	Copes Vulcan	2	600	700 psig 120 F	1	Containment Isolation	A ¹	4
1SI-V512SA-1 V513SB-1 V514SA-1	1-8993A,B,C	SI	RCB	-	Check	ΔP	Westinghouse	1	1500	2485 psig 350 F	6	ECCS Operation	N/A	9
2SI-V537SA-1 V536SB-1 V535SA-1	1-8808A,B,C	SI	RCB	(1)	Gate	Motor	Westinghouse	2	1500	2485 psig AMB	12	ECCS Operation	T	2
1SI-V544SA-1 V545SB-1 V546SA-1	1-8956A,B,C	SI	RCB	-	Check	ΔP	Westinghouse	1	1500	2485 psig AMB	12	ECCS Operation	N/A	9
1SI-V547SA-1 V548SB-1 V549SA-1	1-8948A,B,C	SI	RCB	-	Check	ΔP	Westinghouse	1	1500	2485 psig AMB	12	ECCS Operation	N/A	9

3.9.3-28

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TABLE 3.9.3-13 (Cont'd)

NSSS SUPPLIED ACTIVE CLASS 1, 2, AND 3 VALVES

<u>Ebasco Tag Number</u>	<u>Westinghouse Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Environmental Qualification</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>System Design Rating</u>	<u>System Operating Conditions</u>	<u>Size</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
1S1-V584SA-1 V585SB-1 V586SA-1	1-8973A,B,C	SI	RCB	-	Check	ΔP	Westinghouse	1	1500	2485 psig 359 F	6	ECCS Operation	N/A	9
2RH-F512SB F513SA	FCV-602A&B	RH	RAB	-	Flo-Ctrl.	Motor	Velan	2	600	600 psig 350 F	3	Normal Operation*	A'	6
2RH-V507SA-1	1-8706A	RH	RAB	-	Gate	M	Westinghouse	2	300	600 psig 350 F	8	Accident Mitigation	A'	6
2RH-V506SB	1-8706B	RH	RAB	-	Gate	M	Westinghouse	2	300	600 psig 350 F	8	Accident Mitigation	A'	6
2S1-V581SA V580SB	1-8974A,B	SI	RCB	-	Check	ΔP	Westinghouse	2	1500	2485 psig 350 F	10	ECCS Operation	N/A	9
2S1-V579SA V578SB	1-8888A,B	SI	RAB	(6)	Gate	Motor	Westinghouse	2	1500	2485 psig 350 F	10	ECCS Operation	A'	6
2S1-V577SA V576SB	1-8887A,B	SI	RAB	(6)	Gate	Motor	Westinghouse	2	600	535 psig 350 F	10	ECCS Operation	A'	6
1S1-V510SA V511SB	1-8988A,B	SI	RCB	-	Check	ΔP	Westinghouse	1	1500	2485 psig 350 F	6	ECCS Operation	N/A	9
2S1-V587SA	1-8889	SI	RAB	(6)	Gate	Motor	Westinghouse	2	1500	2485 psig 350 F	10	ECCS Operation	A'	6
2S1-V571SA V570SB	1-8811A,B	SI	RCB	(6)	Gate	Motor	Westinghouse	2	300	400 psig 350 F	14	ECCS Operation	A'	6

3.9.3-29

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TABLE 3.9.3-13 (Cont'd)

HSSS SUPPLIED ACTIVE CLASS 1, 2, AND 3 VALVES

<u>Ebasco Tag Number</u>	<u>Westinghouse Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Environmental Qualification</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>System Design Rating</u>	<u>System Operating Conditions</u>	<u>Size</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
2SI-V573SA V572SB	1-8812A,B	SI	RAB	(6)	Gate	Motor	Westinghouse	2	300	400 psig 350 F	14	ECCS Operation	A'	6
2SI-V575SA V574SB	1-8809A,B	SI	RAB	(6)	Gate	Motor	Westinghouse	2	300	400 psig 350 F	14	ECCS Operation	A'	6
2SI-V591SA V590SB	1-8958A,B	SI	RAB	-	Check	ΔP	Westinghouse	2	300	400 psig 350 F	14	ECCS Operation	N/A	9
2CS-V757SA V759SB	8490A,B	CS	RAB	-	Globe	Motor	Velan	2	1500	2350 psig 130 F	2	ECCS Operation	T	2
2CS-V758SB 760SA	8489A,B	CS	RAB	-	Globe	Motor	Velan	2	1500	2350 psig 130 F	2	ECCS Operation	T	2
2SI-V550SB	1-8961	SI	RAB	-	Globe	Air	Copes Vulcan	2	1500	2485 psig AMB F	3/4	Containment Isolation	A'	6
3CC-B5SA	1-9370	CC	RAB	(6)	Butterfly	Motor	Contintal	3	150	108 psig 112 F	18	ECCS Operation	T	2
3CC-B6SB	1-9371	CC	RAB	(6)	Butterfly	Motor	Contintal	3	150	108 psig 112 F	18	ECCS Operation	T	2
3CC-B19SA	1-9384	CC	RAB	(6)	Butterfly	Motor	Contintal	3	150	108 psig 105 F	18	ECCS Operation	T	2
3CC-B20SB	1-9385	CC	RAB	(6)	Butterfly	Motor	Contintal	3	150	108 psig 105 F	18	ECCS Operation	T	2
2CC-V169SA V170SB	1-9480A,B	CC	RAB	(6)	Gate	Motor	Velan	2	150	108 psig 105 F	6	Isolation	A	10

3.9.3-30

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TABLE 3.9.3-13 (Cont'd)

NSSS SUPPLIED ACTIVE CLASS 1, 2, AND 3 VALVES

<u>Ebasco Tag Number</u>	<u>Westinghouse Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Environmental Qualification</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>System Design Rating</u>	<u>System Operating Conditions</u>	<u>Size</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
2CC-V171SN	1-9500	CC	RAB	-	Check	ΔP	Velan	2	150	108 psig 105 F	6	Containment Isolation	N/A	9
2CC-V172SB	1-9485	CC	RAB	(6)	Gate	Motor	Velan	3	150	108 psig 105 F	6	Containment Isolation	A	10
2CC-V182SB	1-9486	CC	RAB	(6)	Gate	Motor	Velan	2	150	108 psig 125 F	6	Containment Isolation	A	10
2CC-V173SN	1-9504	CC	RAB	-	Check	ΔP	Velan	2	150	108 psig 105 F	6	Isolation	N/A	9
2CC-V183SB	1-9482	CC	RAB	(6)	Gate	Motor	Velan	2	150	108 psig 115 F	6	Containment Isolation	A	10
2CC-V184SA	1-9481	CC	RCB	(1)	Gate	Motor	Velan	2	150	108 psig 115 F	6	Containment Isolation	A	10
2CC-V190SB	1-9484	CC	RAB	(6)	Gate	Motor	Velan	2	1500	108 psig 122 F	4	Containment Isolation	A	10
3CC-V162SA-1 V164SB-1 V163SAB-1	1-9390A,B,C	CC	RAB	-	Check	ΔP	Velan	2	150	108 psig 116 F	18	ECCS Operation	N/A	9
2WL-D650SB-1	1-7136	WL	RAB	(6)	Diaphragm	Air	Grinnel	2	150	125 psig 130 F	3	Containment Isolation	A ¹	6

3.9.3-31

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TABLE 3.9.3-13 (Cont'd)

NSSS SUPPLIED ACTIVE CLASS 1, 2, AND 3 VALVES

<u>Ebasco Tag Number</u>	<u>Westinghouse Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Environmental Qualification</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>System Design Rating</u>	<u>System Operating Conditions</u>	<u>Size</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
2NL-L600SA-1	1-LCV-1003	WL	RCB	(2)	Globe	Air	Copes Vulcan	2	150	125 psig 130 F	3	Containment Isolation	A ¹	5
2MS-V1SAB	CQL-MSVASY-1	MS	RAB	(5)	Globe	Piston	Rockwell	2	900	1091 psig 557 F	34	M.S.I.V.	A ¹	6, 11
2MS-V2SB	CQL-MSVASY-1	MS	RAB	(5)	Globe	Piston	Rockwell	2	900	1091 psig 557 F	34	M.S.I.V.	A ¹	6, 11
2MS-V3SAB	CQL-MSVASY-1	MS	RAB	(5)	Globe	Piston	Rockwell	2	900	1091 psia 557 F	34	M.S.I.V.	A ¹	6, 11
2CC-F2SN	1-FCV-685	CC	RAB	-	Gate	Motor	Velan	2	1500	108 psig 122 F	4	ESF	A	10
3CC-L1SA-1	1-LCV-670	CC	RAB	-	Diaphragm	Air	Grinnel	3	150	108 psig 122 F	3/4	ESF	A ¹	6
3CC-L2SA-1	1-LCV-676	CC	RAB	-	Diaphragm	Air	Grinnel	3	150	108 psig 122 F	3/4	ESF	A ¹	6
2CC-V191SA	1-9483	CC	RCB	(1)	Gate	Motor	Velan	2	1500	108 psig 122 F	4	Containment Isolation	A	10
3CC-V165SA	1-9431A	CC	RAB	(6)	Gate	Motor	Velan	3	150	108 psig 145 F	12	ECCS Operation	A	10
3CC-V167SB	1-9431B	CC	RAB	(6)	Gate	Motor	Velan	3	150	108 psig 145 F	12	ECCS Operation	A	10

3.9.3-32

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TABLE 3.9.3-13 (Cont'd)

HSSS SUPPLIED ACTIVE CLASS 1, 2, AND 3 VALVES

<u>Ebasco Tag Number</u>	<u>Westinghouse Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Environmental Qualification</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>System Design Rating</u>	<u>System Operating Conditions</u>	<u>Size</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
2WG-05905A-1	1-7126	WG	RCB	-	Diaphragm	Air	Grinnel	2	150	2 psig 100 F	3/4	Containment Isolation	A'	6
2WG-02915B-1	1-7150	WG	RCB	-	Diaphragm	Air	Grinnel	2	150	2 psig 100 F	3/4	Containment Isolation	A'	6
3CC-05475A-1	-	CC	RAB	-	Diaphragm	Air	ITT-Grinnel	3	150	108 psig 105 F	4	ECCS Operation	A'	13
3CC-05485B-1	-	CC	RAB	-	Diaphragm	Air	ITT-Grinnel	3	150	108 psig 150 F	4	ECCS Operation	A'	13

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TABLE 3.9.3-14

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3AF-F1SA	AF	RAB	(3)	Flow Control Globe	Electro/Hydraulic	Masonellan	3	900	1600 psig @ 125 F	3	ESF Operation	A ¹	12, 13
3AF-F2SA	AF	RAB	(3)	Flow Control Globe	Electro/Hydraulic	Masonellan	3	900	1600 psig @ 125 F	3	ESF Operation	A ¹	12, 13
3AF-F3SA	AF	RAB	(3)	Flow Control Globe	Electro/Hydraulic	Masonellan	3	900	1600 psig @ 125 F	3	ESF Operation	A ¹	12, 13
3AF-F4SB	AF	RAB	(3)	Flow Control Globe	Electro/Hydraulic	ITT/Hammel Dahl	3	900	1600 psig @ 125 F	3	ESF Operation	A ¹	12, 13
3AF-F5SB	AF	RAB	(3)	Flow Control Globe	Electro/Hydraulic	ITT/Hammel Dahl	3	900	1600 psig @ 125 F	3	ESF Operation	A ¹	12, 13
3AF-F6SB	AF	RAB	(3)	Flow Control Globe	Electro/Hydraulic	ITT/Hammel Dahl	3	900	1600 psig @ 125 F	3	ESF Operation	A ¹	12, 13
3AF-P1SA	AF	RAB	(3)	Press. Control Globe	Electro/Hydraulic	ITT/Hammel Dahl	3	900	1600 psig @ 125 F	4	ESF Operation	A ¹	12, 13
3AF-P2SB	AF	RAB	(3)	Press. Control Globe	Electro/Hydraulic	ITT/Hammel Dahl	3	900	1600 psig @ 125 F	4	ESF Operation	A ¹	12, 13
3AF-V1SA	AF	RAB	(3)	Check	ΔP	Pacific	3	900	1600 psig @ 125 F	4	ESF Operation	N/A	9
3AF-V2SB	AF	RAB	(3)	Check	ΔP	Pacific	3	900	1600 psig @ 125 F	4	ESF Operation	N/A	9

3.9.3-34
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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3AF-V3SAB	AF	RAB	(3)	Check	ΔP	Pacific	3	900	1600 psig @ 125 F	6	ESF Operation	N/A	9
3AF-V8SA	AF	RAB	(3)	Check	ΔP	Pacific	3	900	1600 psig @ 450 F	4	ESF Operation	N/A	9
2AF-V10SAB	AF	RAB	(3)	Gate	Motor	Anchor-Darling	2	900	1600 psig @ 450 F	4	Containment Isolation	A	12, 14
2AF-V19SB	AF	RAB	(3)	Gate	Motor	Anchor-Darling	2	900	1600 psig @ 450 F	4	Containment Isolation	A	12, 14
3AF-V17SA	AF	RAB	(3)	Check	ΔP	Pacific	3	900	1600 psig @ 450 F	4	ESF Operation	N/A	9
3AF-V21SA	AF	RAB	(3)	Check	ΔP	Pacific	3	900	1600 psig @ 450 F	4	ESF Operation	N/A	9
2AF-V23SB	AF	RAB	(3)	Gate	Motor	Anchor-Darling	2	900	1600 psig @ 450 F	4	Containment Isolation	A	12, 14
2AF-V156-SAB-1	AF	RAB	(3)	Gate	Piston	Anchor-Darling	2	900	1860 psig @ 450 F	6	Containment Isolation	A	12, 14
2AF-V157-SAB-1	AF	RAB	(3)	Gate	Piston	Anchor-Darling	2	900	1860 psig @ 450 F	6	Containment Isolation	A	12, 14
2AF-V177-SAB-1	AF	RAB	(3)	Check	-	Anchor-Darling	2	900	1185 psig @ 450 F	6	ESF Operation	N/A	9
2AF-V158-SAB-1	AF	RAB	(3)	Gate	Piston	Anchor-Darling	2	900	1860 psig @ 450 F	6	Containment Isolation	A	12, 14

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TABLE 3.9.3-14 (continued)

NON-ASSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
2AF-V179-SAB-1	AF	RAB	(3)	Check	-	Anchor-Darling	2	900	1185 psig @ 450 F	6	ESF Operation	N/A	9
2AF-V166-SAB-1	AF	RAB	(3)	Globe	Diaphragm	ITT/Hammel Dahl	2	900	1300 psig @ 450 F	1	Containment Isolation	A	12, 18
2AF-V182-SAB-1	AF	RAB	(3)	Check	-	Anchor-Darling	2	900	1185 psig @ 450 F	6	ESF Operation	N/A	9
2AF-V162-SAB-1	AF	RAB	(3)	Globe	Diaphragm	ITT/Hammel Dahl	2	900	1300 psig @ 450 F	1	Containment Isolation	A	12, 18
2AF-V163-SAB-1	AF	RAB	(3)	Globe	Diaphragm	ITT/Hammel Dahl	2	900	1300 psig @ 450 F	1	Containment Isolation	A	12, 18
2AF-V165-SAB	AF	RAB	(3)	Globe	Diaphragm	ITT/Hammel Dahl	2	900	1300 psig @ 450 F	1	Containment Isolation	A	12, 18
2AF-V167-SAB	AF	RAB	(3)	Globe	Diaphragm	ITT/Hammel Dahl	2	900	1300 psig @ 450 F	1	Containment Isolation	A	12, 18
2AF-V164-SAB	AF	RAB	(3)	Globe	Diaphragm	ITT/Hammel Dahl	2	900	1300 psig @ 450 F	1	Containment Isolation	A	12, 18

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3AF-V345B	AF	RAB	(3)	Check	ΔP	Pacific	3	900	1600 psig @ 450 F	4	ESF Operation	N/A	9
3AF-V375B	AF	RAB	(3)	Check	ΔP	Pacific	3	900	1600 psig @ 450 F	4	ESF Operation	N/A	9
2AF-V116SA	AF	RAB	(3)	Gate	Motor	Anchor-Darling	2	900	1600 psig @ 450 F	4	Containment Isolation	A	12, 14
2AF-V117SA	AF	RAB	(3)	Gate	Motor	Anchor-Darling	2	900	1600 psig @ 450 F	4	Containment Isolation	A	12, 14
2AF-V118SA	AF	RAB	(3)	Gate	Motor	Anchor-Darling	2	900	1600 psig @ 450 F	4	Containment Isolation	A	12, 14
3AF-V315B	AF	RAB	(3)	Check	ΔP	Pacific	3	900	1600 psig @ 450 F	4	ESF Operation	N/A	9
2AF-V153SAB	AF	RCB	(4)	Check	ΔP	Anchor-Darling	2	900	1185 psig @ 600 F	6	ESF Operation	N/A	9
2AF-V154SAB	AF	RCB	(4)	Check	ΔP	Anchor-Darling	2	900	1185 psig @ 600 F	6	ESF Operation	N/A	9
2AF-V155SAB	AF	RCB	(4)	Check	ΔP	Anchor-Darling	2	900	1185 psig @ 600 F	6	ESF Operation	N/A	9

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TABLE 3,9,3-14 (continued)

NON-NSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3CE-V41SA	CE	RAB	(3)	Check	ΔP	TRW-Mission	3	150	150 psig @ 140 F	6	ESF Operation	N/A	9
3CE-V42SB	CE	RAB	(3)	Check	ΔP	TRW-Mission	3	150	150 psig @ 140 F	6	ESF Operation	N/A	9
3CE-V43SAB	CE	RAB	(3)	Check	ΔP	TRW-Mission	3	150	150 psig @ 140 F	8	ESF Operation	N/A	9
2CT-V2SA	CT	RAB	(3)	Gate	Motor	Anchor-Darling	2	150	150 psig @ 300 F	12	ECCS Operation	A	12, 20
2CT-V3SB	CT	RAB	(3)	Gate	Motor	Anchor-Darling	2	150	150 psig @ 300 F	12	ECCS Operation	A	12, 20
2CT-V4SA	CT	RAB	(3)	Check	ΔP	Anchor-Darling	2	150	150 psig @ 300 F	12	ECCS Operation	N/A	9
2CT-V5SB	CT	RAB	(3)	Check	ΔP	Anchor-Darling	2	150	150 psig @ 300 F	12	ECCS Operation	N/A	9

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
2CT-V6SA	CT	RAB	(3)	Gate	Motor	Anchor-Darling	2	150	45 psig @ 300 F	12	ECCS Operation	A	12, 20
2CT-V7SB	CT	RAB	(3)	Gate	Motor	Anchor-Darling	2	150	45 psig @ 300 F	12	ECCS Operation	A	12, 20
2CT-V13SA	CT	RAB	(3)	Check	ΔP	Rockwell	2	1500	50 psig @ 200 F	2	ECCS Operation	N/A	9
2CT-V21SA	CT	RAB	(3)	Gate	Motor	Anchor-Darling	2	300	300 psig @ 300 F	8	ECCS Operation	A	12, 20
2CT-V27SA	CT	RCB	(4)	Check	ΔP	Anchor-Darling	2	300	300 psig @ 300 F	8	ECCS Operation	N/A	9
2CT-V35SB	CT	RAB	(3)	Check	ΔP	Rockwell	2	1500	50 psig @ 200 F	2	ECCS Operation	N/A	9
2CT-V43SB	CT	RAB	(3)	Gate	Motor	Anchor-Darling	2	300	300 psig @ 300 F	8	ECCS Operation	A	12, 20
2CT-V51SB	CT	RCB	(4)	Check	ΔP	Anchor-Darling	2	300	300 psig @ 300 F	8	ECCS Operation	N/A	9
3CT-V85SA	CT	RAB	(3)	Globe	Motor	Yarway	3	1500	15 psig @ 200 F	2	ECCS Operation	A	12, 16
3CT-R15AB	CT	RAB	(3)	Safety	S-A	Crosby	3	150	15 psig @ 200 F	1x1	Protect ECCS	T	2
3CT-V95SN	CT	RAB	(3)	Globe	Hand	Yarway	3	1500	15 psig @ 200 F	2	ECCS Operation	A	12, 16

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3CT-X3SAB-1	CT	RAB	(3)	Vacuum Breaker	-	Anderson-Greenwood	3	150	15 psig @ 200 F	2	ECCS Operation	A	12
3CT-X4SAB-1	CT	RAB	(3)	Vacuum Breaker	-	Anderson-Greenwood	3	150	15 psig @ 200 F	2	ECCS Operation	A	12
3CT-V88SB	CT	RAB	(3)	Globe	Motor	Yarway	3	1500	15 psig @ 200 F	2	ECCS Operation	A	12, 16
3FO-V23SA	FO	FOST	(5)	Check	ΔP	Rockwell	3	600	100 psig @ 125 F	2	ESF Operation	N/A	9
3FO-V258SA	FO	FOST	(5)	Globe	Hand	Yarway	3	1500	100 psig @ 125 F	2	ESF Operation	N/A	21
3FO-V24SB	FO	FOST	(5)	Check	ΔP	Rockwell	3	600	100 psig @ 125 F	2	ESF Operation	N/A	9
3FO-V259SB	FO	FOST	(5)	Globe	Hand	Yarway	3	1500	100 psig @ 125 F	2	ESF Operation	N/A	21
2BD-V11SA	BD	RAB	(3)	Globe	Air-Piston	ITT/Hammel Dahl	2	900	1185 psig @ 600 F	4	Containment Isolation	A	12, 13, 17
2BD-V15SA	BD	RAB	(3)	Globe	Air-Piston	ITT/Hammel Dahl	2	900	1185 psig @ 600 F	4	Containment Isolation	A	12, 13, 17
2BD-V19SA	BD	RAB	(3)	Globe	Air-Piston	ITT/Hammel Dahl	2	900	1185 psig @ 600 F	4	Containment Isolation	A	12, 13, 17
2BD-P8SB-1	BD	RCB	(4)	Pressure Control	Diaphragm	ITT/Hammel Dahl	2	900	1185 psig @ 600 F	2	Containment Isolation	A	12, 13, 17, 18

3.9.3-10

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
28D-P7SB-1	BD	RCB	(4)	Pressure Control	Diaphragm	ITT/Hammel Dahl	2	900	1185 psig @ 600 F	2	Isolation	A	12, 17, 18
28D-P6SB-1	BD	RCB	(4)	Pressure Control	Diaphragm	ITT/Hammel Dahl	2	900	1185 psig @ 600 F	2	Isolation	A	12, 17, 18
28D-V2SB-1	BD	RCB	(4)	Globe	Piston	ITT/Hammel Dahl	2	900	1185 psig @ 600 F	4	Isolation	A	12, 13, 17
28D-V5SB-1	BD	RCB	(4)	Globe	Piston	ITT/Hammel Dahl	2	900	1185 psig @ 600 F	4	Isolation	A	12, 13, 17
28D-V8SB-1	BD	RCB	(4)	Globe	Piston	ITT/Hammel Dahl	2	900	1185 psig @ 600 F	4	Containment Isolation	A	12, 13, 17
21A-V33SN	1A	RCB	(4)	Check	ΔP	Anchor-Darling	2	150	125 psig @ 125 F	3	Containment Isolation	N/A	9
21A-V192SA	1A	RAB	(3)	Globe	Diaphragm	Copes-Vulcan	2	600	125 psig @ 125 F	3	Containment Isolation	A	12, 13
2NS-P18SA	MS	RAB	(3)	Press. Control Globe	Electro-Hyd.	Control Coaps	2	900	1185 psig @ 600 F	8x10	ESF Operation	A	12, 16
2NS-P19SB	MS	RAB	(3)	Press. Control Globe	Elect-Hyd.	Control Coaps	2	900	1185 psig @ 600 F	8x10	ESF Operation	A	12, 16

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TABLE 3.9.3-14 (continued)

NON-HSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
2MS-P20SA	MS	RAB	(3)	Press. Control Globe	Elect-Hyd.	Control Comps	2	900	1185 psig @ 600 F	8x10	ESF Operation	A	12, 16
2MS-R15A	MS	RAB	(3)	Relief Safety	S-A	Crosby	2	900	1185 psig @ 600 F	6x10	ESF Operation	A	12, 15
2MS-R25B	MS	RAB	(3)	Relief Safety	S-A	Crosby	2	900	1185 psig @ 600 F	6x10	ESF Operation	A	12, 15
2MS-R35A	MS	RAB	(3)	Relief Safety	S-A	Crosby	2	900	1185 psig @ 600 F	6x10	ESF Operation	A	12, 15
2MS-R45A	MS	RAB	(3)	Relief Safety	S-A	Crosby	2	900	1185 psig @ 600 F	6x10	ESF Operation	A	12, 15
2MS-R55B	MS	RAB	(3)	Relief Safety	S-A	Crosby	2	900	1185 psig @ 600 F	6x10	ESF Operation	A	12, 15
2MS-R65A	MS	RAB	(3)	Relief Safety	S-A	Crosby	2	900	1185 psig @ 600 F	6x10	ESF Operation	A	12, 15
2MS-R75A	MS	RAB	(3)	Relief Safety	S-A	Crosby	2	900	1185 psig @ 600 F	6x10	ESF Operation	A	12, 15
2MS-R85B	MS	RAB	(3)	Relief Safety	S-A	Crosby	2	900	1185 psig @ 600 F	6x10	ESF Operation	A	12, 15
2MS-R95A	MS	RAB	(3)	Relief Safety	S-A	Crosby	2	900	1185 psig @ 600 F	6x10	ESF Operation	A	12, 15

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
2MS-R10SA	MS	RAB	(3)	Relief Safety	S-A	Crosby	2	900	1185 psig @ 600 F	6x10	ESF Operation	A	12, 15
2MS-R11SB	MS	RAB	(3)	Relief Safety	S-A	Crosby	2	900	1185 psig @ 600 F	6x10	ESF Operation	A	12, 15
2MS-R12SA	MS	RAB	(3)	Relief Safety	S-A	Crosby	2	900	1185 psig @ 600 F	6x10	ESF Operation	A	12, 15
2MS-R13SA	MS	RAB	(3)	Relief Safety	S-A	Crosby	2	900	1185 psig @ 600 F	6x10	ESF Operation	A	12, 15
2MS-R14SB	MS	RAB	(3)	Relief Safety	S-A	Crosby	2	900	1185 psig @ 600 F	6x10	ESF Operation	A	12, 15
2MS-R15SA	MS	RAB	(3)	Relief Safety	S-A	Crosby	2	900	1185 psig @ 600 F	6x10	ESF Operation	A	12, 15
3MS-V17SAB	MS	RAB	(3)	Globe	Diaphragm	ITT/Hommel Dahl	3	900	1185 psig @ 600 F	2	Isolation	A	12, 16'
3MS-V18SAB	MS	RAB	(3)	Globe	Diaphragm	ITT/Hommel Dahl	3	900	1185 psig @ 600 F	2	Isolation	A	12, 16
2MS-V8SA	MS	RAB	(3)	Gate	Motor	Anchor-Darling	2	900	1185 psig @ 600 F	6	ESF Operation	A	12, 20
2MS-F1SAB	MS	RAB	(3)	Flow Control	Diaphragm	ITT/Hommel Dahl	2	900	1185 psig @ 600 F	3	Containment Isolation	A	12, 13'

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
2MS-F2SAB	MS	RAB	(3)	Flow Control	Diaphragm	ITT/Hammel Dahl	2	900	1185 psig @ 600 F	3	Containment Isolation	A	12, 13
2MS-F3SAB	MS	RAB	(3)	Flow Control	Diaphragm	ITT/Hammel Dahl	2	900	1185 psig @ 600 F	3	Containment Isolation	A	12, 13
2MS-V59SAB	MS	RAB	(3)	Globe	Diaphragm	ITT/Hammel Dahl	2	900	1185 psig @ 600 F	2	Containment Isolation	A	12, 16
2MS-V60SAB	MS	RAB	(3)	Globe	Diaphragm	ITT/Hammel Dahl	2	900	1185 psig @ 600 F	2	Containment Isolation	A	12, 16
2MS-V61SAB	MS	RAB	(3)	Globe	Diaphragm	ITT/Hammel Dahl	2	900	1185 psig @ 600 F	2	Containment Isolation	A	12, 16
2MS-V95B	MS	RAB	(3)	Gate	Motor	Anchor-Darling	2	900	1185 psig @ 600 F	6	ESF Operation	A	12, 20
3MS-V99SA	MS	RAB	(3)	Check	ΔP	Pacific	2	900	1185 psig @ 600 F	6	ESF Operation	N/A	9
3MS-V100SB	MS	RAB	(3)	Check	ΔP	Pacific	3	900	1185 psig @ 600 F	6	ESF Operation	N/A	9
2MS-V122SAB	MS	RAB	(3)	Globe	Diaphragm	ITT/Hammel Dahl	2	1500	1185 psig @ 600 F	1	Containment Isolation	A	12, 18
2MS-V124SAB	MS	RAB	(3)	Globe	Diaphragm	ITT/Hammel Dahl	2	1500	1185 psig @ 600 F	1	Containment Isolation	A	12, 18
2MS-V126SAB	MS	RAB	(3)	Globe	Diaphragm	ITT/Hammel Dahl	2	1500	1185 psig @ 600 F	1	Containment Isolation	A	12, 18

3.9.3-14

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
2ND-V365A	HD	RCB	(4)	Gate	Motor	Anchor-Darling	3	150	60 psig @ 150 F	3	Containment Isolation	A	12, 14
2ND-V775B	HD	RAB	(3)	Gate	Motor	Anchor-Darling	2	150	60 psig @ 150 F	3	Containment Isolation	A	12, 14

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TABLE 3.9.3-14 (continued)

NON-ISSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3SC-V33SB	SC	ESWIS	(5)	Check	ΔP	Pacific	3	150	200 psig @ 95 F	3	ESF Operation	N/A	9
3SC-V48SA	SC	SCRN STR	(5)	Globe	EH	ITT/Hammel Dahl	3	150	200 psig @ 95 F	3	ESF Operation	A	12, 13
3SC-V15SA	SC	ESWIS	(5)	Globe	EH	ITT/Hammel Dahl	3	150	200 psig @ 95 F	3	ESF Operation	A	12, 13
3SC-V26SA	SC	SCRN STR	(5)	Globe	EH	ITT/Hammel Dahl	3	150	200 psig @ 95 F	3	ESF Operation	A	12, 13
3SC-V30SB	SC	ESWIS	(5)	Globe	EH	ITT/Hammel Dahl	3	150	200 psig @ 95 F	3	ESF Operation	A	12, 13
3SC-V31SB	SC	SCRN STR	(5)	Globe	EH	ITT/Hammel Dahl	3	150	200 psig @ 95 F	3	ESF Operation	A	12, 13
3SC-V28SA	SC	ESWIS	(5)	Check	ΔP	Pacific	3	150	200 psig @ 95 F	3	ESF Operation	N/A	9
2SP-V23SA-1	SP	RAB	(3)	Globe	Solenoid	Target Rock	2	2500	2485 psig @ 650 F	3/8	Containment Isolation	T	2
2SP-V11SB-1	SP	RCB	(4)	Globe	Solenoid	Target Rock	2	2500	2485 psig @ 650 F	3/8	Containment Isolation	T	2
2SP-V12SA-1	SP	RAB	(3)	Globe	Solenoid	Target Rock	2	2500	2485 psig @ 650 F	3/8	Containment Isolation	T	2
2SP-V111SB-1	SP	RCB	(4)	Globe	Solenoid	Target Rock	2	2500	2485 psig @ 650 F	3/8	Containment Isolation	T	2

3.9.3-46

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
2SP-V113SB-1	SP	RCB	(4)	Globe	Solenoid	Target Rock	2	1500	700 psig @ 300 F	3/8	Containment Isolation	T	2
2SP-V114SB-1	SP	RCB	(4)	Globe	Solenoid	Target Rock	2	1500	700 psig @ 300 F	3/8	Containment Isolation	T	2
2SP-V115SB-1	SP	RCB	(4)	Globe	Solenoid	Target Rock	2	1500	700 psig @ 300 F	3/8	Containment Isolation	T	2
2SP-V116SA-1	SP	RAB	(3)	Globe	Solenoid	Target Rock	2	1500	700 psig @ 300 F	3/8	Containment Isolation	T	2
2SP-V2SA-1	SP	RAB	(3)	Globe	Solenoid	Target Rock	2	2500	2485 psig @ 680 F	3/8	Containment Isolation	T	2
2SP-V1SB-1	SP	RCB	(4)	Globe	Solenoid	Target Rock	2	2500	2485 psig @ 680 F	3/8	Containment Isolation	T	2
2SP-V21SA-1	SP	RCB	(4)	Globe	Solenoid	Target Rock	2	2500	2485 psig @ 650 F	3/8	Post Accident Sampling	T	2
2SP-V22SB-1	SP	RCB	(4)	Globe	Solenoid	Target Rock	2	2500	2485 psig @ 650 F	3/8	Post Accident Sampling	T	2
2SP-V90SB-1	SP	RCB	(4)	Globe	Solenoid	Target Rock	2	1500	1185 psig @ 600 F	3/4	Isolation	T	2
2SP-V91SB-1	SP	RCB	(4)	Globe	Solenoid	Target Rock	2	1500	1185 psig @ 600 F	3/4	Isolation	T	2

3.9.3-47

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
2SP-V120SA-1	SP	RAB	(3)	Globe	Solenoid	Target Rock	2	1500	1185 psig @ 600 F	3/8	Containment Isolation	T	2
2SP-V121SA-1	SP	RAB	(3)	Globe	Solenoid	Target Rock	2	1500	1185 psig @ 600 F	3/8	Containment Isolation	T	2
2SP-V86SB-1	SP	RCB	(4)	Globe	Solenoid	Target Rock	2	1500	1185 psig @ 600 F	3/4	Isolation	T	2
2SP-V85SB-1	SP	RCB	(4)	Globe	Solenoid	Target Rock	2	1500	1185 psig @ 600 F	3/4	Isolation	T	2
2SP-V81SB-1	SP	RCB	(4)	Globe	Solenoid	Target Rock	2	1500	1185 psig @ 600 F	3/4	Isolation	T	2
2SP-V80SB-1	SP	RCB	(4)	Globe	Solenoid	Target Rock	2	1500	1185 psig @ 600 F	3/4	Isolation	T	2
2SP-V122SA-1	SP	RAB	(3)	Globe	Solenoid	Target Rock	2	1500	1185 psig @ 600 F	3/8	Containment Isolation	T	2
3SW-B1SA	SW	ESWIS	(3)	Butterfly	Motor	Jamesbury	3	150	25 psig @ 140 F	30	ESF Operation	A	12, 19
3SW-B2SB	SW	ESWIS	(3)	Butterfly	Motor	Jamesbury	3	150	25 psig @ 140 F	30	ESF Operation	A	12, 19
3SW-B3SA	SW	ESWIS	(5)	Butterfly	Motor	Allis-Chalmers	3	150	30 psig @ 140 F	8"x10"	ESF Operation	A	12, 19

3.9.3-48

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TABLE 3.9.3-14 (continued)

NON-HSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3SW-B4SB	SW	ESWIS	(5)	Butterfly	Motor	Allis-Chalmers	3	150	30 psig @ 140 F	8"x10"	ESF Operation	A	12, 19
3SW-B5SA	SW	RAB	(3)	Butterfly	Motor	Jamesbury	3	150	150 psig @ 140 F	30	ESF Operation	A	12, 19
3SW-B6SB	SW	RAB	(3)	Butterfly	Motor	Jamesbury	3	150	150 psig @ 140 F	30	ESF Operation	A	12, 19
3SW-B6SA	SW	RAB	(3)	Butterfly	Motor	Jamesbury	3	150	150 psig @ 140 F	36	ESF Operation	A	12, 19
3SW-B13SB	SW	RAB	(3)	Butterfly	Motor	Jamesbury	3	150	150 psig @ 140 F	30	ESF Operation	A	12, 19
3SW-B14SB	SW	RAB	(3)	Butterfly	Motor	Jamesbury	3	150	150 psig @ 140 F	30	ESF Operation	A	12, 19
3SW-B15SA	SW	RAB	(3)	Butterfly	Motor	Jamesbury	3	150	150 psig @ 140 F	30	ESF Operation	A	12, 19
3SW-B16SB	SW	RAB	(3)	Butterfly	Motor	Jamesbury	3	150	150 psig @ 140 F	30	ESF Operation	A	12, 19

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3SW-B64SA	SW	RAB	(3)	Butterfly	Diaphragm	ITT/Hammel Dahl	3	150	225 psig @ 195 F	14	ESF Operation	A	12, 17, 19
3SW-B65SB	SW	RAB	(3)	Butterfly	Diaphragm	ITT/Hammel Dahl	3	150	225 psig @ 195 F	14	ESF Operation	A	12, 17, 19
3SW-B70SA	SW	RAB	(3)	Butterfly	Motor	Jamesbury	3	150	150 psig @ 140 F	8	ESF Operation	A	12, 19
3SW-B71SA	SW	RAB	(3)	Butterfly	Motor	Jamesbury	3	150	150 psig @ 140 F	8	ESF Operation	A	12, 19
3SW-B72SB	SW	RAB	(3)	Butterfly	Motor	Jamesbury	3	150	150 psig @ 140 F	8	ESF Operation	A	12, 19
3SW-B73SB	SW	RAB	(3)	Butterfly	Motor	Jamesbury	3	150	150 psig @ 140 F	8	ESF Operation	A	12, 19
3SW-B75SA	SW	RAB	(3)	Butterfly	Motor	Jamesbury	3	150	150 psig @ 140 F	6	ESF Operation	A	12, 19
3SW-B77SB	SW	RAB	(3)	Butterfly	Motor	Jamesbury	3	150	150 psig @ 140 F	6	ESF Operation	A	12, 19

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TABLE 3.9.3-14 (continued)

NON-HSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3SW-B74SA	SW	RAB	(3)	Butterfly	Motor	Jamesbury	3	150	150 psig @ 140 F	6	ESF Operation	A	12, 19
3SW-B76SB	SW	RAB	(3)	Butterfly	Motor	Jamesbury	3	150	150 psig @ 140 F	6	ESF Operation	A	12, 19
2SW-V142SN	SW	RCB	(4)	Check	ΔP	Anchor-Dartling	2	150	225 psig @ 140 F	12	Containment Isolation	N/A	9
2SW-B885AB	SW	RAB	(3)	Butterfly	Diaphragm	ITT/Hammel Dahl	2	150	225 psig @ 140 F	12	Containment Isolation	A	12, 17, 19
2SW-B89SA	SW	RCB	(4)	Butterfly	Diaphragm	ITT/Hammel Dahl	2	150	225 psig @ 140 F	12	Containment Isolation	A	12, 17, 19
2SW-B90SB	SW	RAB	(3)	Butterfly	Diaphragm	ITT/Hammel Dahl	2	150	225 psig @ 140 F	12	Containment Isolation	A	12, 17, 19
3SW-V39SA	SW	RAB	(3)	Check	ΔP	TRW-Mission	3	150	225 psig @ 140 F	14	ESF Operation	N/A	9
3SW-V41SB	SW	RAB	(3)	Check	ΔP	TRW-Mission	3	150	225 psig @ 140 F	14	ESF Operation	N/A	9
3SW-V540SA	SW	RAB	(3)	Check	ΔP	Rockwell	3	1500	150 psig @ 140 F	1 1/2	ECCS Operation	N/A	9

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TABLE 3.9.3-14 (continued)

NON-HSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3SW-V543SB	SW	RAB	(3)	Check	ΔP	Rockwell	3	1500	150 psig @ 140 F	1 1/2	ECCS Operation	N/A	9
3SW-V541SB	SW	RAB	(3)	Check	ΔP	Rockwell	3	1500	150 psig @ 140 F	1 1/2	ECCS Operation	N/A	9
3SW-V542SA	SW	RAB	(3)	Check	ΔP	Rockwell	3	1500	150 psig @ 140 F	1 1/2	ECCS Operation	N/A	9
3SW-V544SB	SW	RAB	(3)	Check	ΔP	Rockwell	3	1500	150 psig @ 140 F	1 1/2	ECCS Operation	N/A	9
3SW-V545SA	SW	RAB	(3)	Check	ΔP	Rockwell	3	1500	150 psig @ 140 F	1 1/2	ECCS Operation	N/A	9

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3SW-V237SA	SW	RAB	(3)	Gate	Piston	Anchor-Darling	3	150	150 psig @ 140 F	4	ESF Operation	A	14
3SW-V238SB	SW	RAB	(3)	Gate	Piston	Anchor-Darling	3	150	150 psig @ 140 F	4	ESF Operation	A	14
3SW-V266SA	SW	RAB	(3)	Gate	Piston	Anchor-Darling	3	150	150 psig @ 140 F	4	ESF Operation	A	14
3SW-V267SB	SW	RAB	(3)	Gate	Piston	Anchor-Darling	3	150	150 psig @ 140 F	4	ESF Operation	A	14
3SW-V367SA	SW	RAB	(3)	Check	ΔP	TRW-Mission	3	150	150 psig @ 140 F	30	ESF Operation	N/A	9
3SW-V368SB	SW	RAB	(3)	Check	ΔP	TRW-Mission	3	150	150 psig @ 140 F	30	ESF Operation	N/A	9
3SW-V369SN	SW	RAB	(3)	Check	ΔP	TRW-Mission	3	150	150 psig @ 140 F	36	ESF Operation	N/A	9
3SW-V652SB-1	SW	DGB	(5)	Globe	Solenoid	Target Rock	3	150	150 psig @ 140 F	2	ESF Operation	T	2
3SW-V649SA-1	SW	DGB	(5)	Globe	Solenoid	Target Rock	3	150	150 psig @ 140 F	2	ESF Operation	T	2
2FW-V26SAB	FW	RAB	(3)	Gate	EH	Borg Warner	2	921	1860 psig @ 450 F	16	Containment Isolation	A	12, 20
2FW-V27SAB	FW	RAB	(3)	Gate	EH	Borg Warner	2	921	1860 psig @ 450 F	16	Containment Isolation	A	12, 20

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TABLE 3.9.3-14 (continued)

NON-MSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

Tag Number	System	Location	Env. Qual.	Type	Operator	Manufacturer	Safety Class	Valve Design Rating (ANSI #)	System Design Conditions	Size (Inches-ID)	Function	Methodology (1)	Notes
2FW-V28SAB	FW	RAB	(3)	Gate	EH	Borg Warner	2	921	1860 psig @ 450 F	16	Containment Isolation	A	12, 20
2FW-V23SN	FW	RAB	(3)	Check	ΔP	Borg Warner	2	921	1860 psig @ 450 F	16	Isolation	N/A	9
2FW-V24SN	FW	RAB	(3)	Check	ΔP	Borg Warner	2	921	1860 psig @ 450 F	16	Isolation	N/A	9
2FW-V25SN	FW	RAB	(3)	Check	ΔP	Borg Warner	2	921	1860 psig @ 450 F	16	Isolation	N/A	9
2FW-V123SAB	FW	RAB	(3)	Globe	Diaphragm	ITT/Hommel Dahl	2	900	1860 psig @ 450 F	3	Containment Isolation	A	12, 13, 17
2FW-V124SAB	FW	RAB	(3)	Globe	Diaphragm	ITT/Hommel Dahl	2	900	1860 psig @ 450 F	3	Containment Isolation	A	12, 13, 17
2FW-V125SAB	FW	RAB	(3)	Globe	Diaphragm	ITT/Hommel Dahl	2	900	1860 psig @ 450 F	3	Containment Isolation	A	12, 13, 17
2FW-V93SAB-1	FW	RAB	(3)	Globe	Diaphragm	ITT/Hommel Dahl	2	1500	1300 psig @ 450 F	1	Containment Isolation	A	12, 18
2FW-V94SAB-1	FW	RAB	(3)	Globe	Diaphragm	ITT/Hommel Dahl	2	1500	1300 psig @ 450 F	1	Containment Isolation	A	12, 18
2FW-V91SAB-1	FW	RAB	(3)	Globe	Diaphragm	ITT/Hommel Dahl	2	1500	1300 psig @ 450 F	1	Containment Isolation	A	12, 18

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TABLE 3.9.3-14 (continued)

NON-HSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
2FW-V92SAB-1	FW	RAB	(3)	Globe	Diaphragm	ITT/Hammel Dahl	2	1500	1300 psig @ 450 F	1	Containment Isolation	A	12, 18
2FW-V89SAB-1	FW	RAB	(3)	Globe	Diaphragm	ITT/Hammel Dahl	2	1500	1300 psig @ 450 F	1	Containment Isolation	A	12, 18
2FW-V90SAB-1	FW	RAB	(3)	Globe	Diaphragm	ITT/Hammel Dahl	2	1500	1300 psig @ 450 F	1	Containment Isolation	A	12, 18
2FP-B1SA	FP	RAB	(3)	Butterfly	Diaphragm	Jamesdary	2	150	175 psig @ 125 F	6	Containment Isolation	A	12, 19

3.9.3-55

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TABLE 3.9.3-14 (continued)

NON-HSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3CH-B1SB	ESCWS Supply	RAB	(3)	Butterfly	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	4	Isolation	A	12, 19
3CH-B3SA	ESCWS Supply	RAB	(3)	Butterfly	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	4	Isolation	A	12, 19
3CX-B1SB	ESCWS Return	RAB	(3)	Butterfly	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	4	Isolation	A	12, 17, 19
3CX-B4SA	ESCWS Return	RAB	(3)	Butterfly	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	4	Isolation	A	12, 17, 19
3SW-V821SB	SW	RAB	(3)	Wafer Check	ΔP	TRW-Mission	3	150	150 psig @ 140 F	8	Prevent Backflow	N/A	9
3CX-V243SB	ESCWS Return	RAB	(3)	Globe	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	2 1/2	Temperature Control	A	12, 13
3CX-W17SA	ESCWS Return	RAB	(3)	Three-Way Globe	Electro-Hydraulic	ITT/Hammel Dahl	3	150	150 psig @ 125 F	1 1/2	Temperature Control	A	12, 18

3.9.3-56

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3CX-W24SB	ESCMS Return	RAB	(3)	Three-Way	Electro-Hydraulic	ITT/Hammel Dahl	3	150	150 psig @ 125 F	1 1/2	Temperature Control	A	12, 18
3AV-B1SA	Emer. Exh. Sys.	RAB	(3)	Butterfly	Motor	BIF	3	150	1 psig @ 124 F	20	Open-Close	A	12, 19
3AV-B2SA	Emer. Exh. Sys.	RAB	(3)	Butterfly	Motor	BIF	3	150	1 psig @ 124 F	20	Open-Close	A	12, 19
3AV-B3SB	Emer. Exh. Sys.	RAB	(3)	Butterfly	Motor	BIF	3	150	1 psig @ 124 F	6	Open-Close	A	12, 19
3AV-B4SB	Emer. Exh. Sys.	RAB	(3)	Butterfly	Motor	BIF	3	150	1 psig @ 124 F	20	Open-Close	A	12, 19
3AV-B5SB	Emer. Exh. Sys.	RAB	(3)	Butterfly	Motor	BIF	3	150	1 psig @ 124 F	20	Open-Close	A	12, 19
3AV-B6SA	Emer. Exh. Sys.	RAB	(3)	Butterfly	Motor	BIF	3	150	1 psig @ 124 F	6	Open-Close	A	12, 19
3CZ-B1SA	CR O.A. Intake	RAB	(3)	Butterfly	Motor	BIF	3	150	3 psig @ 95 F	16	Isolation	A	12, 19
3CZ-B2SB	CR O.A. Intake	RAB	(3)	Butterfly	Motor	BIF	3	150	3 psig @ 95 F	16	Isolation	A	12, 19
3CZ-B3SA	CR Exh. Sys.	RAB	(3)	Butterfly	Motor	BIF	3	150	1 psig @ 75 F	12	Isolation	A	12, 19

3.9.3-57

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TABLE 3.9.3-14 (continued)

NON-HSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3CZ-B4SB	CR Exh. Sys.	RAB	(3)	Butterfly	Motor	BIF	3	150	1 psig @ 75 F	12	Isolation	A	12, 19
3CZ-B5SA	Equip. Protect Rm OA Intake	RAB	(3)	Butterfly	Motor	BIF	3	150	1 psig @ 95 F	12	Isolation	A	12, 19
3CZ-B6SB	Equip. Protect Rm OA Intake	RAB	(3)	Butterfly	Motor	BIF	3	150	1 psig @ 95 F	12	Isolation	A	12, 19
3CZ-B7SA	HVAC Equip. Rm Exh. System	RAB	(3)	Butterfly	Motor	BIF	3	150	1 psig @ 90 F	12	Isolation	A	12, 19
3CZ-B8SB	HVAC Equip. Rm Exh. System	RAB	(3)	Butterfly	Motor	BIF	3	150	1 psig @ 90 F	12	Isolation	A	12, 19
3CZ-B9SA	CR Emer. O.A. Intake	RAB	(3)	Butterfly	Motor	BIF	3	150	3 psig @ 95 F	12	Isolation	A	12, 19
3CZ-B10SB	CR Emer. O.A. Intake	RAB	(3)	Butterfly	Motor	BIF	3	150	3 psig @ 95 F	12	Isolation	A	12, 19
3CZ-B11SA	CR Emer. O.A. Intake	RAB	(3)	Butterfly	Motor	BIF	3	150	3 psig @ 95 F	12	Isolation	A	12, 19

3.9.3-58

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TABLE 3.9.3-14 (continued)

NON-NSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3CZ-B12SB	CR Emer. O.A. Intake	RAB	(3)	Butterfly	Motor	BIF	3	150	3 psig @ 95 F	12	Isolation	A	12, 19
3CX-V63SB	ESCWS Return	RAB	(3)	Globe	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	2 1/2	Temperature Control	A	12, 13
3CX-V83SA	ESCWS Return	RAB	(3)	Globe	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	2 1/2	Temperature Control	A	12, 13

3.9.3-59

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3CZ-B195A	CR Emer. Filtration System	RAB	(3)	Butterfly	Motor	BIF	3	150	1 psig @ 62 F	20	Open-Close	A	12, 19
3CZ-B205B	CR Emer. Filtration System	RAB	(3)	Butterfly	Motor	BIF	3	150	1 psig @ 62 F	20	Open-Close	A	12, 19
3CZ-B215A	CR Emer. Filtration System	RAB	(3)	Butterfly	Motor	BIF	3	150	1 psig @ 62 F	20	Open-Close	A	12, 19

3.9.3-59a

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TABLE 3.9.3-14 (continued)

NON-HSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3CZ-B22SB	CR Emer. Filtration System	RAB	(3)	Butterfly	Motor	BIF	3	150	1 psig @ 62 F	20	Open-Close	A	12, 19
3CZ-B23SA	CR Emer. Filtration System	RAB	(3)	Butterfly	Motor	BIF	3	150	1 psig @ 62 F	20	Open-Close	A	12, 19
3CZ-B24SB	CR Emer. Filtration System	RAB	(3)	Butterfly	Motor	BIF	3	150	1 psig @ 62 F	20	Open-Close	A	12, 19
3CZ-B25SA	CR Air Handling Unit	RAB	(3)	Butterfly	Motor	BIF	3	150	1 psig @ 80 F	36	Open-Close	A	12, 19
3CZ-B26SB	CR Air Handling Unit	RAB	(3)	Butterfly	Motor	BIF	3	150	1 psig @ 80 F	36	Open-Close	A	12, 19

3.9.3-59b

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3FY-B2SA	FHB Emer. Exh. Sys.	FHB	(3)	Butterfly	Motor	BIF	3	150	1 psig @ 120 F	24	Open-Close	A	12, 19
3FY-B4SB	FHB Emer. Exh. Sys.	FHB	(3)	Butterfly	Motor	BIF	3	150	1 psig @ 120 F	24	Open-Close	A	12, 19
3AV-V3SA	RAB Emer. Exh. Sys.	RAB	(3)	Check Valve	ΔP	Anderson/ Greenwood Co.	3	150	150 psig @ 150 F	6	Bleed air for charcoal decay heat cooling	N/A	9
3AV-V4SB	RAB Emer. Exh. Sys.	RAB	(3)	Check Valve	ΔP	Anderson/ Greenwood Co.	3	150	150 psig @ 150 F	6	Bleed air for charcoal decay heat cooling	N/A	9
3CZ-V1SA	CR Emer. Filtration System	RAB	(3)	Check Valve	ΔP	Anderson/ Greenwood Co.	3	150	150 psig @ 150 F	6	Outside Air Intake	N/A	9
3CZ-V2SB	CR Emer. Filtration System	RAB	(3)	Check Valve	ΔP	Anderson/ Greenwood Co.	3	150	150 psig @ 150 F	6	Outside Air Intake	N/A	9

3.9.3-59c

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
1CS-V711SN	CS	RCB	(4)	Check	ΔP	Rockwell	1	1521	2485 psig @ 650 F	2	RCPB Boundary	N/A	9
1CS-V70SN	CS	RCB	(4)	Check	ΔP	Rockwell	1	1521	2485 psig @ 650 F	2	RCPB Boundary	N/A	9
2CS-V129SN	CS	RAB	(3)	Check	ΔP	Rockwell	2	1500	220 psig @ 200 F	2	Safe Shutdown	N/A	9
3CS-V222SN	CS	RAB	(3)	Check	ΔP	Rockwell	3	1500	150 psig @ 250 F	2	Safe Shutdown	N/A	9
3CS-V223SN	CS	RAB	(3)	Check	ΔP	Rockwell	3	1500	150 psig @ 250 F	2	Safe Shutdown	N/A	9
1SI-V39SA V45SB V51SA	SI	RCB	(4)	Check	ΔP	Rockwell	1	1521	2485 psig @ 650 F	2	RCPB Boundary	N/A	9
1SI-V63SA V69SB V75SA	SI	RCB	(4)	Check	ΔP	Rockwell	1	1521	2485 psig @ 650 F	2	RCPB Boundary	N/A	9

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
ISI-V84SA Y90SB V96SA	SI	RCB	(4)	Check	ΔP	Rockwell	1	1521	2485 psig @ 650 F	2	RCPB Boundary	N/A	9
ISI-V17SA V23SB V29SA	SI	RCB	(4)	Check	ΔP	Rockwell	1	1521	2485 psig @ 650 F	2	RCPB Boundary	N/A	9
2CB-B1SA	CB Containment Vacuum Relief	RAB	(3)	Butterfly	Pneumatic	BIF	2	150	45 psig @ 366 F	24	Open-Close	A	12, 17, 19
2CB-B2SB	CB Containment Vacuum Relief	RAB	(3)	Butterfly	Pneumatic	BIF	2	150	45 psig @ 366 F	24	Open-Close	A	12, 17, 19
2CP-B1SA	CB Normal Containment Purge Make-up	RCB	(4)	Butterfly	Pneumatic	BIF	2	150	45 psig @ 366 F	8	Containment Isolation	A	12, 17, 19
2CP-B2SB	CB Normal Containment Purge Make-up	RAB	(3)	Butterfly	Pneumatic	BIF	2	150	45 psig @ 366 F	8	Containment Isolation	A	12, 17, 19

3.9.3-59a

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
2CP-B3SA	CB Containment Pre-Entry Purge Make-up	RCB	(4)	Butterfly	Pneumatic	BIF	2	150	45 psig @ 366 F	42	Containment Isolation	A	12, 17, 19
2CP-B4SB	CB Containment Pre-Entry Purge Make-up	RAB	(3)	Butterfly	Pneumatic	BIF	2	150	45 psig @ 366 F	42	Containment Isolation	A	12, 17, 19
2CP-B5SA	CB Normal Containment Purge	RCB	(4)	Butterfly	Pneumatic	BIF	2	150	45 psig @ 366 F	8	Containment Isolation	A	12, 17, 19
2CP-B6SB	CB Normal Containment Purge	RAB	(3)	Butterfly	Pneumatic	BIF	2	150	45 psig @ 366 F	8	Containment Isolation	A	12, 17, 19
2CP-B7SA	CB Containment Pre-Entry Purge	RCB	(4)	Butterfly	Pneumatic	BIF	2	150	45 psig @ 366 F	42	Containment Isolation	A	12, 17, 19

3.9.3-59E

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
2CP-B8SB	CB Containment Pre-Entry Purge	RAB	(3)	Butterfly	Pneumatic	BIF	2	150	45 psig @ 366 F	42	Containment Isolation	A	12, 17, 19
2CB-V1SA	Vacuum Relief System	RCB	(4)	HYAC Check Valves	None	Anderson/ Greenwood Co.	2	150	150 psig @ 366 F	24	Vacuum Relief	N/A	9
2CB-V2SB	Vacuum Relief System	RCB	(4)	HYAC Check Valves	None	Anderson/ Greenwood Co.	2	150	150 psig @ 366 F	24	Vacuum Relief	N/A	9

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TABLE 3.9.3-14 (continued)

NON-HSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
1CS-V22SN	CS	RCB	(4)	Check	ΔP	Rockwell	1	1521	2485 psig @ 650 F	1 1/2	Safe Shutdown	N/A	9
1CS-V23SN	CS	RCB	(4)	Check	ΔP	Rockwell	1	1521	2485 psig @ 650 F	1 1/2	Safe Shutdown	N/A	9
1CS-V24SN	CS	RCB	(4)	Check	ΔP	Rockwell	1	1521	2485 psig @ 650 F	1 1/2	Safe Shutdown	N/A	9
2CS-V25SB	CS	RCB	(4)	Check	ΔP	Rockwell	2	1500	2735 psig @ 200 F	1 1/2	Safe Shutdown	N/A	9

3.9.3-59h

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
2CS-V265B	CS	RCB	(4)	Check	ΔP	Rockwell	2	1500	2735 psig @ 200 F	1 1/2	Safe Shutdown	N/A	9
2CS-V275B	CS	RCB	(4)	Check	ΔP	Rockwell	2	1500	2735 psig @ 200 F	1 1/2	Safe Shutdown	N/A	9
1CS-V345N	CS	RCB	(4)	Check	ΔP	Rockwell	1	1521	2485 psig @ 650 F	1 1/2	Safe Shutdown	N/A	9
1CS-V355N	CS	RCB	(4)	Check	ΔP	Rockwell	1	1521	2485 psig @ 650 F	1 1/2	Safe Shutdown	N/A	9
1CS-V365N	CS	RCB	(4)	Check	ΔP	Rockwell	1	1521	2485 psig @ 650 F	1 1/2	Safe Shutdown	N/A	9
2CS-V675B	CS	RCB	(4)	Check	ΔP	Rockwell	2	1500	150 psig @ 500 F	3/4	Containment Isolation	N/A	9
2SI-V188SA	SI	RCB	(4)	Check	ΔP	Rockwell	2	1500	700 psig @ 300 F	1	Containment Isolation	N/A	9
2SI-V1505B	SI	RCB	(4)	Check	ΔP	Rockwell	2	1500	2735 psig @ 300 F	1	Containment Isolation	N/A	9
2CC-V515N	CC	RCB	(4)	Check	ΔP	Rockwell	2	600	150 psig @ 200 F	3/4	Containment Isolation	N/A	9

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
2CC-V50SN	CC	RCB	(4)	Check	ΔP	Rockwell	2	1500	2485 psig @ 650 F	3/4	Containment Isolation	N/A	9
3CC-V64SN	CC	RCB	(4)	Check	ΔP	Rockwell	3	1500	2485 psig @ 650 F	2	RCS pressure boundary Isol.	N/A	9
3CC-V65SN	CC	RCB	(4)	Check	ΔP	Rockwell	3	1500	2485 psig @ 650 F	2	RCS pressure boundary Isol.	N/A	9
3CC-V284SN	CC	RCB	(4)	Check	ΔP	Rockwell	3	1500	2485 psig @ 650 F	2	RCS pressure boundary Isol.	N/A	9
3CC-V209SN	CC	RAB	(3)	Check	ΔP	Rockwell	3	600	150 psig @ 200 F	3/4	CCMS pressure boundary Isol.	N/A	9
3CC-V210SN	CC	RAB	(3)	Check	ΔP	Rockwell	3	600	150 psig @ 200 F	3/4	CCMS pressure boundary Isol.	N/A	9
3SW-V868SA-1	SW	RAB	(3)	Globe	Solenoid	Target-Rock	3	150	150 psig @ 140 F	1	ESF Operation	T	2
3SW-V869SB-1	SW	RAB	(3)	Globe	Solenoid	Target-Rock	3	150	150 psig @ 140 F	1	ESF Operation	T	2

3.9.3-591

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3SW-V870SA-1	SW	RAB	(3)	Check	ΔP	Rockwell	3	600	150 psig @ 140 F	1	ESF Operation	N/A	9
3SW-V871SB-1	SW	RAB	(3)	Check	ΔP	Rockwell	3	600	150 psig @ 140 F	1	ESF Operation	N/A	9
2CS-V136SN	CS	RAB	(3)	Check	ΔP	Rockwell	2	1500	2735 psig @ 200 F	2	ESF Operation	N/A	9
2CS-V137SN	CS	RAB	(3)	Check	ΔP	Rockwell	2	1500	2735 psig @ 200 F	2	ESF Operation	N/A	9
2CS-V138SN	CS	RAB	(3)	Check	ΔP	Rockwell	2	1500	2735 psig @ 200 F	2	ESF Operation	N/A	9
2SP-V308SB-1	SP	RCB	(5)	Globe	Solenoid	Target-Rock	2	600	90 psig @ 400 F	1	H ₂ Analyzer	T	2
2SP-V314SB-1	SP	RAB	(3)	Globe	Solenoid	Target-Rock	2	600	90 psig @ 400 F	1	H ₂ Analyzer	T	2
2SP-V309SB-1	SP	RCB	(5)	Globe	Solenoid	Target-Rock	2	600	90 psig @ 400 F	1	H ₂ Analyzer	T	2
2SP-V315SB-1	SP	RAB	(3)	Globe	Solenoid	Target-Rock	2	600	90 psig @ 400 F	1	H ₂ Analyzer	T	2
3CH-B2SA-1	ESCWS Supply	RAB	(3)	Butterfly	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	4	Isolation	A	12, 17, 19
3CH-B4SB-1	ESCWS Supply	RAB	(3)	Butterfly	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	4	Isolation	A	12, 17, 19

3.9.3-59K

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3CX-B2SA-1	ESCWS Return	RAB	(3)	Butterfly	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	4	Isolation	A	12, 17, 19
3CX-B3SB-1	ESCWS Return	RAB	(3)	Butterfly	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	4	Isolation	A	12, 17, 19
3CX-R1SA-1	ESCWS Return	RAB	(3)	Relief	S-A	Crosby	3	150	150 psig @ 125 F	1	Pressure relief	T	2
3CX-R2SA-1	ESCWS Return	RAB	(3)	Relief	S-A	Crosby	3	150	150 psig @ 125 F	1	Pressure relief	T	2
3CX-R3SB-1	ESCWS Return	RAB	(3)	Relief	S-A	Crosby	3	150	150 psig @ 125 F	1	Pressure relief	T	2
3CX-R4SB-1	ESCWS Return	RAB	(3)	Relief	S-A	Crosby	3	150	150 psig @ 125 F	1	Pressure relief	T	2
3CX-V121SA-1	ESCWS Return	RAB	(3)	Globe	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	1	Temperature control	A	12, 17, 18

3.9.3-591

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

Tag Number	System	Location	Env. Qual.	Type	Operator	Manufacturer	Safety Class	Valve Design Rating (ANSI #)	System Design Conditions	Size (Inches-ID)	Function	Methodology ⁽¹⁾	Notes
3CX-V122SA	ESCHS Return	RAB	(3)	Globe	Diaphragm	ITT/Hommel Dahl	3	600	150 psig @ 125 F	1.5	Temperature control	A	12, 17, 18
3CX-V123SA	ESCHS Return	RAB	(3)	Globe	Diaphragm	ITT/Hommel Dahl	3	600	150 psig @ 125 F	1.5	Temperature control	A	12, 17, 18
3CX-V244SB	ESCHS Return	RAB	(3)	Globe	Diaphragm	ITT/Hommel Dahl	3	600	150 psig @ 125 F	1	Temperature control	A	12, 17, 18
3CX-V245SB	ESCHS Return	RAB	(3)	Globe	Diaphragm	ITT/Hommel Dahl	3	600	150 psig @ 125 F	1.5	Temperature control	A	12, 17, 18
3CX-V247SB	ESCHS Return	WPB	(3)	Globe	Diaphragm	ITT/Hommel Dahl	3	600	150 psig @ 125 F	1	Temperature control	A	12, 17, 18
3CX-W1SA	ESCHS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hommel Dahl	3	150	150 psig @ 125 F	2.5	Temperature control	A	12, 17, 18
3CX-W2SA	ESCHS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hommel Dahl	3	150	150 psig @ 125 F	2.5	Temperature control	A	12, 16, 17
3CX-W3SB	ESCHS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hommel Dahl	3	150	150 psig @ 125 F	2.5	Temperature control	A	12, 17, 18
3CX-W4SB	ESCHS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hommel Dahl	3	150	150 psig @ 125 F	2.5	Temperature control	A	12, 16, 17
3CX-W5SA	ESCHS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hommel Dahl	3	150	150 psig @ 125 F	2.5	Temperature control	A	12, 16, 17
3CX-W7SA	ESCHS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hommel Dahl	3	150	150 psig @ 125 F	3	Temperature control	A	12, 16, 17

3.9.3-59m

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3CX-W8SA	ESCWS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	2.5	Temperature control	A	12, 16, 17
3CX-W9SA	ESCWS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	3	Temperature control	A	12, 13, 17
3CX-W10SB	ESCWS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	3	Temperature control	A	12, 13, 17
3CX-W12SB	ESCWS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	2.5	Temperature control	A	12, 13
3CX-W13SB	ESCWS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	2.5	Temperature control	A	12, 13
3CX-W14SB	ESCWS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	3	Temperature control	A	12, 13, 17
3CX-W15SA	ESCWS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	2.5	Temperature control	A	12, 13
3CX-W16SA	ESCWS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	3	Temperature control	A	12, 13
3CX-W18SA	ESCWS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	1.5	Temperature control	A	12, 13
3CX-W19SA	ESCWS Return	FHB	(3)	Three-Way Globe	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	2.5	Temperature control	A	12, 13
3CX-W20SA	ESCWS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hammel Dahl	3	150	150 psig @ 125 F	2.5	Temperature control	A	12, 13

3.9.3-59n

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TABLE 3.9.3-14 (continued)

NON-HSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3CX-W215A	ESCWS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hommel Dahl	3	150	150 psig @ 125 F	2.5	Temperature control	A	12, 13
3CX-W225B	ESCWS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hommel Dahl	3	150	150 psig @ 125 F	2.5	Temperature control	A	12, 13
3CX-W235B	ESCWS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hommel Dahl	3	150	150 psig @ 125 F	3	Temperature control	A	12, 13
3CX-W255B	ESCWS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hommel Dahl	3	150	150 psig @ 125 F	1.5	Temperature control	A	12, 13
3CX-W265B	ESCWS Return	FHB	(3)	Three-Way Globe	Diaphragm	ITT/Hommel Dahl	3	150	150 psig @ 125 F	2.5	Temperature control	A	12, 13
3CX-W275B	ESCWS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hommel Dahl	3	150	150 psig @ 125 F	2.5	Temperature control	A	12, 13
3CX-W295B	ESCWS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hommel Dahl	3	150	150 psig @ 125 F	2.5	Temperature control	A	12, 13
3CX-W325A	ESCWS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hommel Dahl	3	1500	150 psig @ 125 F	1.5	Temperature control	A	12, 17, 18
3CX-W335B	ESCWS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hommel Dahl	3	1500	150 psig @ 125 F	1.5	Temperature control	A	12, 17, 18
3CX-W345A	ESCWS Return	RAB	(3)	Three-Way Globe	Diaphragm	ITT/Hommel Dahl	3	150	150 psig @ 125 F	1.5	Temperature control	A	12, 18

3.9.3-590

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3FP-V120SB-1	FP	RAB	(3)	Globe	Solenoid	Target-Rock	3	150	125 psig @ 125 F	1	ESF	A	12, 18
3FP-V121SA-1	FP	RAB	(3)	Globe	Solenoid	Target-Rock	3	150	125 psig @ 125 F	1	ESF	A	12, 18
3FP-V132SB-1	FP	RAB	(3)	Globe	Solenoid	Target-Rock	3	150	125 psig @ 125 F	1	ESF	A	12, 18
3FP-V133SA-1	FP	RAB	(3)	Globe	Solenoid	Target-Rock	3	150	125 psig @ 125 F	1	ESF	A	12, 18
3SA-V301SA-1	SA	RAB	(3)	Globe	Solenoid	Target-Rock	3	150	125 psig @ 125 F	1	ESF	T	2
3SA-V302SB-1	SA	RAB	(3)	Globe	Solenoid	Target-Rock	3	150	125 psig @ 125 F	1	ESF	T	2
3SA-V306SB-1	SA	RAB	(3)	Globe	Solenoid	Target-Rock	3	150	125 psig @ 125 F	1	ESF	T	2
3SA-V307SA-1	SA	RAB	(3)	Globe	Solenoid	Target-Rock	3	150	125 psig @ 125 F	1	ESF	T	2
3SW-B300SA-1	SW	RAB	(3)	Butterfly	Electro-Hydraulic	ITT/Hammel Dahl	3	150	150 psig @ 140 F	10	Temp. Control Modulating	A	12, 19
3SW-B303SB-1	SW	RAB	(3)	Butterfly	Electro-Hydraulic	ITT/Hammel Dahl	3	150	150 psig @ 140 F	10	Temp. Control Modulating	A	12, 19

3.9.3-59p

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TABLE 3.9.3-14 (continued)

NON-NSSS SUPPLIED CLASS 1, 2 AND 3 ACTIVE VALVES

<u>Tag Number</u>	<u>System</u>	<u>Location</u>	<u>Env. Qual.</u>	<u>Type</u>	<u>Operator</u>	<u>Manufacturer</u>	<u>Safety Class</u>	<u>Valve Design Rating (ANSI #)</u>	<u>System Design Conditions</u>	<u>Size (Inches-ID)</u>	<u>Function</u>	<u>Methodology⁽¹⁾</u>	<u>Notes</u>
3CX-R6SA-1	CSCWS Return	RAB	(3)	Relief	S-A	Crosby	3	150	150 psig @ 125 F	3/4	Pressure Relief	A	12, 15
3CX-B5SB-1	CSCWS Return	RAB	(3)	Relief	S-A	Crosby	3	150	150 psig @ 125 F	3/4	Pressure Relief	A	12, 15
3CH-R2SB-1	CSCWS Supply	RAB	(3)	Relief	S-A	Crosby	3	150	150 psig @ 125 F	3/4	Pressure Relief	A	12, 15
3CH-R1SA-1	CSCWS Supply	RAB	(3)	Relief	S-A	Crosby	3	150	150 psig @ 125 F	3/4	Pressure Relief	A	12, 15
3SW-R16SA-1	SW	RAB	(3)	Relief	S-A	Crosby	3	150	150 psig @ 140 F	3/4	Pressure Relief	A	12, 15
3SW-R17SB-1	SW	RAB	(3)	Relief	S-A	Crosby	3	150	150 psig @ 140 F	3/4	Pressure Relief	A	12, 15
3SW-V800SA-1	SW	RAB	(3)	Wafer Check	ΔP	TWR/Mission	3	150	150 psig @ 140 F	8	Prevent Backflow	N/A	9

3.9.3-59g