

ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

SESSION NBR: 9104170110 DOC. DATE: 91/04/09 NOTARIZED: NO DOCKET #
 FACIL: 50-315 Donald C. Cook Nuclear Power Plant, Unit 1, Indiana & 05000315
 50-316 Donald C. Cook Nuclear Power Plant, Unit 2, Indiana & 05000316
 AUTH. NAME AUTHOR AFFILIATION
 FITZPATRICK, E. Indiana Michigan Power Co. (formerly Indiana & Michigan Ele
 RECIP. NAME RECIPIENT AFFILIATION
 MURLEY, T.E. Document Control Branch (Document Control Desk)

SUBJECT: Forwards rev to inservice tesing program resulting from
 901207 response to open items in Insp Repts 50-315/90-201 &
 50-316/90-201 re lack of inclusion of certain ESW check
 valves into inservice testing program.

DISTRIBUTION CODE: A047D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 26
 TITLE: OR Submittal: Inservice Inspection/Testing/Relief from ASME Code

NOTES:

RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
PD3-1 LA	1 0	PD3-1 PD	1 1
COLBURN, T.	2 2		
INTERNAL: AEOD/DSP/TPAB	1 1	NRR/DET/ECMB 9H	1 1
NRR/DET/EMEB 7E	1 1	NUDOCS-ABSTRACT	1 1
OC/LEMB	1 0	OGC/HDS2	1 0
<u>REG FILE</u> 01	1 1	RES/DSIR/EIB	1 1
INTERNAL: EG&G BROWN, B	1 1	EG&G RANSOME, C	1 1
NRC PDR	1 1	NSIC	1 1

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK,
 ROOM P1-37 (EXT. 20079) TO ELIMINATE YOUR NAME FROM DISTRIBUTION
 LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTTR 16 ENCL 13

Indiana Michigan
Power Company
One Summit Square
P.O. Box 60
Fort Wayne, IN 46801
219 425 2111



AEP:NRC:0969S

Donald C. Cook Nuclear Plant Units 1 and 2
Docket Nos. 50-315 and 50-316
License Nos. DPR-58 and DPR-74
IST PROGRAM REVISION/CHECK VALVE REVERSE FLOW

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

Attn: T. E. Murley

April 9, 1991

Dear Dr. Murley:

References:

- 1) Letter AEP:NRC:1125H, M. P. Alexich to A. B. Davis, "Inspection Reports 50-315/90201 (DRS) and 50-316/90201 (DRS)," dated December 7, 1990.
- 2) Letter AEP:NRC:0969R, M. P. Alexich to T. E. Murley, "Revised Second 10-year Inservice Test Program," dated February 16, 1990.
- 3) Letter, J. G. Glitter to M. P. Alexich, "Safety Evaluation Report of the Inservice Testing (IST) Program for Pumps and Valves, D. C. Cook Nuclear Station, Units 1 and 2 (TAC Nos. 60028/60029)," dated August 29, 1989.

This letter transmits a revision to the In-service Testing Program for the Donald C. Cook Nuclear Plant. This revision results from our response to Inspection Report 50-315/90201 and 50-316/90201 Open Item 90-201-09, "Lack of Inclusion of Certain ESW Check Valves Into IST Program." (Reference 1) The program has revised the requirements for the following essential service water system valves:

1-ESW-111	2-ESW-141
1-ESW-112	2-ESW-142
1-ESW-113	2-ESW-143
1-ESW-114	2-ESW-144
1-ESW-101E	2-ESW-102E
1-ESW-101W	2-ESW-102W

9104170110 910409
PDR ADOCK 05000315
Q PDR

A047
11

The revised pages of the IST program are included in Attachment 1. These changes will be implemented by July 10, 1991. This will allow time to revise the applicable test procedures.

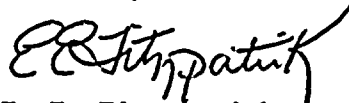
As part of our response to the open item, we committed to review the IST program for those check valves not currently assigned a backflow checking safety function, and to make any changes deemed necessary. This review, which is currently in progress, has been expanded beyond the scope identified in our February 16, 1990 (Reference 2) submittal, and it is estimated that the review will be completed with necessary program changes submitted by October 30, 1991.

Additionally, during the review for this submittal, we discovered two changes to our IST program which were not specifically identified in Attachment 4, Item 3 of our February 16, 1990 submittal. These changes are the deletion of the full flow test for valves RH-133 and -134 (these are passive valves which have no open safety function) and a revised relief request for valves SI-158, L1 thru L4 and SI-161, L1 thru L4. The relief was requested because of radiation exposure to plant personnel taking the required flow measurements rather than low temperature overpressure concerns noted in the Safety Evaluation Report (Reference 3). The previously submitted pages of the IST program are included as Attachment 2 for your information.

This letter has been reviewed by the Plant Nuclear Safety Review Committee.

This document has been prepared following Corporate procedures that incorporate a reasonable set of controls to ensure its accuracy and completeness prior to signature by the undersigned.

Sincerely,



E. E. Fitzpatrick
Vice President

ldp

Attachments

cc: D. H. Williams, Jr.
A. A. Blind - Bridgman
J. R. Padgett
G. Charnoff
NFEM Section Chief
A. B. Davis - Region III
NRC Resident Inspector - Bridgman

ATTACHMENT 1

REVISION TO THE DONALD C. COOK NUCLEAR PLANT
IN-SERVICE INSPECTION PROGRAM

DONALD C. COOK NUCLEAR PL

2ND TEN YEAR INSPECTION INTERVAL OF

VALVE TEST PROGRAM FOR UNIT - 1

LIST OF DRAWINGS

Revision No: 3A

Figure 2

Date: 3-7-91

<u>NO.</u>	<u>SYSTEM</u>	<u>FLOW DIAGRAM NO.</u>	<u>REVISION</u>
	Main Steam	1-5105	29
	Main Steam	1-5105B	35
	Steam Generating System	1-5105D	1
	Feedwater	1-5106	35
	Feedwater (Auxiliary)	1-5106A	38
	Essential Service Water	1-5113	46
	Non-Essential Service Water	1-5114A	31
	Station Drainage Containment	1-5124	22
	Reactor Coolant	1-5128	19
	Reactor Coolant	1-5128A	37
	CVCS-Reactor Letdown & Charging	1-5129	31
		1-5129A	19
	Component Cooling	1-5135	35
	Component Cooling	1-5135A	30
	Component Cooling	1-5135B	14
	Nuclear Sampling	1-5141	29
	Nuclear Sampling	1-5141A	32
	Post Accident Sampling-Containment Hydrogen	1-5141D	10

DONALD C. COOK NUCLEAR P

VALVE TEST PROGRAM

RELIEF REQUEST NOTES

Flow Diagram No: 1-5113-46

Revision No: 3A

Date: 3-7-91

NOTE 1: ESW-111, -112, -113, -114 (Code Relief): These check valves open to provide cooling water flow to various Emergency Diesel Generator loads. In addition, these valves close to prevent back flow into the opposite ESW train header. The open safety function will be tested in accordance with IWV-3520. The closed safety function cannot be tested in accordance with IWV-3520 for the following reasons: There are no external position indicators associated with the valves, and no instrumentation or taps available at the valve to determine positive closure. In order to determine valve closure, an entire ESW header and safety train, including both Emergency Diesel Generators, must be removed from service. These valves cannot be tested at cold shutdown frequency since, with fuel loaded, the ESW is at its highest load demand (RHR operating) at this time and cannot be removed from service. The closed safety function of these valves shall be verified by disassembly at refueling frequency.

NOTE 2: ESW-109, -115, -243 (Cold Shutdown Justification): These valves are normally closed and are required to be open when the condensate storage tank is exhausted. Exercising the valves could cause lake water contamination of the steam generators. Lake water chemistry can potentially impact steam generator tube integrity. Therefore, the valves will be full stroke tested at a cold shutdown frequency. Since the valves are manual, stroke timing is not required.

DONALD C. COOK NUCLEAR PLANT

VALVE TEST PROGRAM

RELIEF REQUEST NOTES

Flow Diagram No: 1-5113-46

Revision No: 3A

Date: 3-7-91

NOTE 3: WRV-721, -723, -725, -727 (Code Relief): These valves are located in the essential service water supply lines to the emergency diesel generators air after coolers. These three-way valves regulate water flow to maintain the temperature at which the after cooler air discharge thermostatic controller has been set. Water flow is regulated by passing a portion of the flow through the air coolers and bypassing the excess flow around the air after coolers. Code relief is being requested from the testing requirements since (1), these valves function only as regulating valves and not open/closed valves (2), these valves are demonstrated operable during diesel generator testing (diesel generators are tested per Technical Specification 4.8.1.1.2); and (3), these valves are demonstrated operable during diesel generator 24 hour runs performed each refueling outage. The valves will be "fail-safe" tested using their control scheme that will remove air from the valve operators causing them to direct all ESW flow to the air after coolers. This proposed test for each valve will be performed at refueling frequency. The valves cannot be stroke timed because they are thermostatic valves whose position is controlled by process fluid temperature. There is no external control available.

NOTE 4: ESW-101E, -101W (Comment): Testing of the backflow checking function cannot be performed if the opposite unit's ESW System is not available. Should the opposite unit's ESW System not be available when testing of this valve's backflow checking function is required, the testing will be deferred until the opposite unit's ESW System is returned to service, and will be performed as soon as practical thereafter.

DONALD C. COOK NUCLEAR PLANT
SECOND TEN YEAR INTERVAL
VALVE SUMMARY SHEET - UNIT 01
FLOW DIAGRAM: 1-5113-46

4/2/91 16:30

SYSTEM: ESSENTIAL SERVICE WATER

VALVE						VALVE POSITION		ASME SECTION XI						
Number	Revision	Type	Size	Actuator Type	P&ID Coordinates	Power Operation	Safety Function	Code Class	Active/Passive	Category	Primary Test Required	Test Performed	Test Mode	Relief Request(s)
01-ESW-101-E	3A	CK	20.00	SA	N/8	C	O/C	3	A	C	CF-1	CF-1	P	NO, NOTE 4
01-ESW-101-W	3A	CK	20.00	SA	H/8	C	O/C	3	A	C	CF-1	CF-1	P	NO, NOTE 4
01-ESW-109	3	BF	4.00	M	B/5	C	O	3	A	B	EF-1	EF-2	C	NO, CSJ 2
01-ESW-111	3A	CK	6.00	SA	C/6	C	O/C	3	A	C	CF-1	CF-1	P	YES, NOTE 1
01-ESW-112	3A	CK	6.00	SA	C/6	C	O/C	3	A	C	CF-1	CF-1	P	YES, NOTE 1
01-ESW-113	3A	CK	6.00	SA	B/6	C	O/C	3	A	C	CF-1	CF-1	P	YES, NOTE 1
01-ESW-114	3A	CK	6.00	SA	B/6	C	O/C	3	A	C	CF-1	CF-1	P	YES, NOTE 1
01-ESW-115	3	BF	6.00	M	E/6	C	O	3	A	B	EF-1	EF-2	C	NO, CSJ 2
01-ESW-168-N	3	BF	3.00	M	H/1	C	O	3	A	B	EF-1	EF-1	P	NO
01-ESW-168-S	3	BF	3.00	M	H/1	C	O	3	A	B	EF-1	EF-1	P	NO
01-ESW-169-N	3	BF	3.00	M	G/1	O	C	3	A	B	EF-1	EF-1	P	NO
01-ESW-169-S	3	BF	3.00	M	G/1	O	C	3	A	B	EF-1	EF-1	P	NO
01-ESW-170-N	3	BF	3.00	M	F/1	O	C	3	A	B	EF-1	EF-1	P	NO
01-ESW-170-S	3	BF	3.00	M	F/1	O	C	3	A	B	EF-1	EF-1	P	NO
01-ESW-171-N	3	BF	3.00	M	F/1	C	O	3	A	B	EF-1	EF-1	P	NO
01-ESW-171-S	3	BF	3.00	M	F/1	C	O	3	A	B	EF-1	EF-1	P	NO
01-ESW-243	3	BF	4.00	M	D/6	C	O	3	A	B	EF-1	EF-2	C	NO, CSJ 2
01-SV-14-E	3	REL	1.00	SA	A/1	C	O	3	A	C	TF-1	TF-1	R	NO
01-SV-14-W	3	REL	1.00	SA	C/1	C	O	3	A	C	TF-1	TF-1	R	NO
01-SV-15-E	3	REL	0.75	SA	E/4	C	O	3	A	C	TF-1	TF-1	R	NO
01-SV-15-W	3	REL	0.75	SA	G/4	C	O	3	A	C	TF-1	TF-1	R	NO
01-SV-16-AB	3	REL	1.00	SA	C/8	C	O	3	A	C	TF-1	TF-1	R	NO
01-SV-16-CD	3	REL	1.00	SA	C/8	C	O	3	A	C	TF-1	TF-1	R	NO

DONALD C. COOK NUCLEAR PLANT
SECOND TEN YEAR INTERVAL
VALVE SUMMARY SHEET - UNIT 01
FLOW DIAGRAM: 1-5113-46

4/2/91 16:30

SYSTEM: ESSENTIAL SERVICE WATER

VALVE						VALVE POSITION		ASME SECTION XI						
Number	Revision	Type	Size	Actuator Type	P&ID Coordinates	Power Operation	Safety Function	Code Class	Active/Passive	Category	Primary Test Required	Test Performed	Test Mode	Relief Request(s)
01-WMO-701	3	BF	20.00	MO	N/8	C	O	3	A	B	EF-1	EF-1	P	NO
											EF-5	EF-5	-	NO
											ET-XXX	ET-XXX	P	NO
01-WMO-702	3	BF	20.00	MO	H/8	C	O	3	A	B	EF-1	EF-1	P	NO
											EF-5	EF-5	-	NO
											ET-XXX	ET-XXX	P	NO
01-WMO-705	3	BF	20.00	MO	G/6	O	O/C	3	A	B	EF-1	EF-1	P	NO
											EF-5	EF-5	-	NO
											ET-XXX	ET-XXX	P	NO
01-WMO-707	3	BF	20.00	MO	G/7	O	O/C	3	A	B	EF-1	EF-1	P	NO
											EF-5	EF-5	-	NO
											ET-XXX	ET-XXX	P	NO
01-WMO-713	3	BF	12.00	MO	A/5	C	O	3	A	B	EF-1	EF-1	P	NO
											EF-5	EF-5	-	NO
											ET-XXX	ET-XXX	P	NO
01-WMO-717	3	BF	12.00	MO	B/5	C	O	3	A	B	EF-1	EF-1	P	NO
											EF-5	EF-5	-	NO
											ET-XXX	ET-XXX	P	NO
01-WMO-721	3	BF	6.00	MO	D/6	C	O	3	A	B	EF-1	EF-1	P	NO
											EF-5	EF-5	-	NO
											ET-XXX	ET-XXX	P	NO
01-WMO-723	3	BF	6.00	MO	C/6	C	O	3	A	B	EF-1	EF-1	P	NO
											EF-5	EF-5	-	NO
											ET-XXX	ET-XXX	P	NO
01-WMO-725	3	BF	6.00	MO	B/6	C	O	3	A	B	EF-1	EF-1	P	NO
											EF-5	EF-5	-	NO
											ET-XXX	ET-XXX	P	NO
01-WMO-727	3	BF	6.00	MO	B/6	C	O	3	A	B	EF-1	EF-1	P	NO
											EF-5	EF-5	-	NO
											ET-XXX	ET-XXX	P	NO
01-WMO-733	3	BF	16.00	MO	C/3	O/C	O	3	A	B	EF-1	EF-1	P	NO
											EF-5	EF-5	-	NO
											ET-XXX	ET-XXX	P	NO

DONALD C. COOK NUCLEAR PLANT
SECOND TEN YEAR INTERVAL
VALVE SUMMARY SHEET - UNIT 01
FLOW DIAGRAM: 1-5113-46

4/2/91 16:38

SYSTEM: ESSENTIAL SERVICE WATER

VALVE						VALVE POSITION		ASME SECTION XI						
Number	Revision	Type	Size	Actuator Type	P&ID Coordinates	Power Operation	Safety Function	Code Class	Active/ Passive	Category	Primary Test Required	Test Performed	Test Mode	Relief Request(s)
01-WMO-737	3	BF	16.00	MO	E/3	O/C	O	3	A	B	EF-1 EF-5 ET-XXX	EF-1 EF-5 ET-XXX	P - P	NO NO NO
01-WMO-744	3	BF	4.00	MO	D/6	C	O	3	A	B	EF-1 EF-5 ET-XXX	EF-1 EF-5 ET-XXX	P - P	NO NO NO
01-WMO-753	3	BF	6.00	MO	D/6	C	O	3	A	B	EF-1 EF-5 ET-XXX	EF-1 EF-5 ET-XXX	P - P	NO NO NO
01-WMO-754	3	BF	4.00	MO	B/5	C	O	3	A	B	EF-1 EF-5 ET-XXX	EF-1 EF-5 ET-XXX	P - P	NO NO NO
01-WRV-721	3	3W	4.00	A	D/8	O	O	3	A	B	EF-1 EF-7 ET-XXX	NOTE 3 EF-8 NOTE 3	P R -	YES, NOTE 3 YES, NOTE 3 YES, NOTE 3
01-WRV-723	3	3W	4.00	A	B/8	O	O	3	A	B	EF-1 EF-7 ET-XXX	NOTE 3 EF-8 NOTE 3	P R -	YES, NOTE 3 YES, NOTE 3 YES, NOTE 3
01-WRV-725	3	3W	4.00	A	D/8	O	O	3	A	B	EF-1 EF-7 ET-XXX	NOTE 3 EF-8 NOTE 3	P R -	YES, NOTE 3 YES, NOTE 3 YES, NOTE 3
01-WRV-727	3	3W	4.00	A	B/8	O	O	3	A	B	EF-1 EF-7 ET-XXX	NOTE 3 EF-8 NOTE 3	P R -	YES, NOTE 3 YES, NOTE 3 YES, NOTE 3

DONALD C. COOK NUCLEAR PL

2ND TEN YEAR INSPECTION INTERVAL OF

VALVE TEST PROGRAM FOR UNIT - 2

LIST OF DRAWINGS

Revision No: 3A

Figure 2

Date: 3-7-91

<u>NO.</u>	<u>SYSTEM</u>	<u>FLOW DIAGRAM NO.</u>	<u>REVISION</u>
	Main Steam	2-5105B	42
	Steam Generating System	2-5105D	2
	Feedwater	2-5106	34
	Feedwater (Auxiliary)	2-5106A	41
	Essential Service Water	2-5113	41
	Non-Essential Service Water	2-5114A	27
	Station Drainage Containment	2-5124	20
	Reactor Coolant	2-5128	19
	Reactor Coolant	2-5128A	34
	CVCS-Reactor Letdown & Charging	2-5129	32
		2-5129A	20
	Component Cooling	2-5135	34
	Component Cooling	2-5135A	30
	Component Cooling	2-5135B	14
	Nuclear Sampling	2-5141	27
	Nuclear Sampling	2-5141A	30
	Post Accident Sampling-Containment Hydrogen	2-5141D	8

VALVE TEST PROGRAM

RELIEF REQUEST NOTES

Flow Diagram No: 2-5113-41

Revision No: 3A

Date: 3-7-91

NOTE 1: ESW-141, -142, -143, -144 (Code Relief): These check valves open to provide cooling water flow to various Emergency Diesel Generator loads. In addition, these valves close to prevent back flow into the opposite ESW train header. The open safety function will be tested in accordance with IWV-3520. The closed safety function cannot be tested in accordance with IWV-3520 for the following reasons: There are no external position indicators associated with the valves, and no instrumentation or taps available at the valve to determine positive closure. In order to determine valve closure, an entire ESW header and safety train, including both Emergency Diesel Generators, must be removed from service. These valves cannot be tested at cold shutdown frequency since, with fuel loaded, the ESW is at its highest load demand (RHR operating) at this time and cannot be removed from service. The closed safety function of these valves shall be verified by disassembly at refueling frequency.

NOTE 2: ESW-145, -240, -243 (Cold Shutdown Justification): These valves are normally closed and are required to be open when the condensate storage tank is exhausted. Exercising the valves could cause lake water contamination of the steam generators. Lake water chemistry can potentially impact steam generator tube integrity. Therefore, the valves will be full stroke tested at a cold shutdown frequency. Since the valves are manual, stroke timing is not required.

VALVE TEST PROGRAM

RELIEF REQUEST NOTES

Flow Diagram No: 2-5113-41

Revision No: 3A

Date: 3-7-91

NOTE 3: WRV-722, -724, -726, -728 (Code Relief): These valves are located in the essential service water supply lines to the emergency diesel generators air after coolers. These three-way valves regulate water flow to maintain the temperature at which the after cooler air discharge thermostatic controller has been set. Water flow is regulated by passing a portion of the flow through the air coolers and bypassing the excess flow around the air after coolers. Code relief is being requested from the testing requirements since (1), these valves function only as regulating valves and not open/closed valves (2), these valves are demonstrated operable during diesel generator testing (diesel generators are tested per Technical Specification 4.8.1.1.2); and (3), these valves are demonstrated operable during diesel generator 24 hour runs performed each refueling outage. The valves will be "fail-safe" tested using their control scheme that will remove air from the valve operators causing them to direct all ESW flow to the air after coolers. This proposed test for each valve will be performed at refueling frequency. The valves cannot be stroke timed because they are thermostatic valves whose position is controlled by process fluid temperature. There is no external control available.

NOTE 4: ESW-102E, -102W (Comment): Testing of the backflow checking function cannot be performed if the opposite unit's ESW System is not available. Should the opposite unit's ESW System not be available when testing of this valve's backflow checking function is required, the testing will be deferred until the opposite unit's ESW System is returned to service, and will be performed as soon as practical thereafter.

DONALD C. COOK NUCLEAR PLANT
SECOND TEN YEAR INTERVAL
VALVE SUMMARY SHEET - UNIT 02
FLOW DIAGRAM: 2-5113-41

4/2/91 16:35

SYSTEM: ESSENTIAL SERVICE WATER

VALVE						VALVE POSITION		ASME SECTION XI						
Number	Revision	Type	Size	Actuator Type	P&ID Coordinates	Power Operation	Safety Function	Code Class	Active/Passive	Category	Primary Test Required	Test Performed	Test Mode	Relief Request(s)
02-ESW-102-2E	3A	CK	20.00	SA	H/8	C	O/C	3	A	C	CF-1	CF-1	P	NO, NOTE 4
02-ESW-102-2W	3A	CK	20.00	SA	H/8	C	O/C	3	A	C	CF-1	CF-1	P	NO, NOTE 4
02-ESW-141	3A	CK	6.00	SA	K/6	C	O/C	3	A	C	CF-1	CF-1	P	YES, NOTE 1
02-ESW-142	3A	CK	6.00	SA	L/6	C	O/C	3	A	C	CF-1	CF-1	P	YES, NOTE 1
02-ESW-143	3A	CK	6.00	SA	M/6	C	O/C	3	A	C	CF-1	CF-1	P	YES, NOTE 1
02-ESW-144	3A	CK	6.00	SA	M/6	C	O/C	3	A	C	CF-1	CF-1	P	YES, NOTE 1
02-ESW-145	3	BF	4.00	M	J/6	C	O	3	A	B	EF-1	EF-2	C	NO, CSJ 2
02-ESW-168-N	3	BF	3.00	M	H/1	C	O	3	A	B	EF-1	EF-1	P	NO
02-ESW-168-S	3	BF	3.00	M	H/1	C	O	3	A	B	EF-1	EF-1	P	NO
02-ESW-169-N	3	BF	3.00	M	G/1	O	C	3	A	B	EF-1	EF-1	P	NO
02-ESW-169-S	3	BF	3.00	M	G/1	O	C	3	A	B	EF-1	EF-1	P	NO
02-ESW-170-N	3	BF	3.00	M	F/1	O	C	3	A	B	EF-1	EF-1	P	NO
02-ESW-170-S	3	BF	3.00	M	F/1	O	C	3	A	B	EF-1	EF-1	P	NO
02-ESW-171-N	3	BF	3.00	M	F/1	C	O	3	A	B	EF-1	EF-1	P	NO
02-ESW-171-S	3	BF	3.00	M	F/1	C	O	3	A	B	EF-1	EF-1	P	NO
02-ESW-240	3	BF	6.00	M	M/5	C	O	3	A	B	EF-1	EF-2	C	NO, CSJ 2
02-ESW-243	3	BF	4.00	M	J/7	C	O	3	A	B	EF-1	EF-2	C	NO, CSJ 2
02-SV-14-2E	3	REL	1.00	SA	L/1	C	O	3	A	C	TF-1	TF-1	R	NO
02-SV-14-2W	3	REL	1.00	SA	M/1	C	O	3	A	C	TF-1	TF-1	R	NO
02-SV-15-2E	3	REL	0.75	SA	G/3	C	O	3	A	C	TF-1	TF-1	R	NO
02-SV-15-2W	3	REL	0.75	SA	J/4	C	O	3	A	C	TF-1	TF-1	R	NO
02-SV-16-AB	3	REL	1.00	SA	L/8	C	O	3	A	C	TF-1	TF-1	R	NO
02-SV-16-CD	3	REL	1.00	SA	L/8	C	O	3	A	C	TF-1	TF-1	R	NO

DONALD C. COOK NUCLEAR PLANT
SECOND TEN YEAR INTERVAL
VALVE SUMMARY SHEET - UNIT 02
FLOW DIAGRAM: 2-5113-41

4/2/91 16:35

SYSTEM: ESSENTIAL SERVICE WATER

VALVE						VALVE POSITION		ASME SECTION XI						
Number	Revision	Type	Size	Actuator Type	P&ID Coordinates	Power Operation	Safety Function	Code Class	Active/Passive	Category	Primary Test Required	Test Performed	Test Mode	Relief Request(s)
02-WMO-703-2E	3	BF	20.00	MO	H/8	C	O	3	A	B	EF-1 EF-5 ET-XXX	EF-1 EF-5 ET-XXX	P - P	NO NO NO
02-WMO-704-2W	3	BF	20.00	MO	H/8	C	O	3	A	B	EF-1 EF-5 ET-XXX	EF-1 EF-5 ET-XXX	P - P	NO NO NO
02-WMO-706	3	BF	20.00	MO	G/8	O	O/C	3	A	B	EF-1 EF-5 ET-XXX	EF-1 EF-5 ET-XXX	P - P	NO NO NO
02-WMO-708	3	BF	20.00	MO	G/6	O	O/C	3	A	B	EF-1 EF-5 ET-XXX	EF-1 EF-5 ET-XXX	P - P	NO NO NO
02-WMO-714	3	BF	12.00	MO	M/5	C	O	3	A	B	EF-1 EF-5 ET-XXX	EF-1 EF-5 ET-XXX	P - P	NO NO NO
02-WMO-718	3	BF	12.00	MO	N/5	C	O	3	A	B	EF-1 EF-5 ET-XXX	EF-1 EF-5 ET-XXX	P - P	NO NO NO
02-WMO-722	3	BF	6.00	MO	M/6	C	O	3	A	B	EF-1 EF-5 ET-XXX	EF-1 EF-5 ET-XXX	P - P	NO NO NO
02-WMO-724	3	BF	6.00	MO	M/6	C	O	3	A	B	EF-1 EF-5 ET-XXX	EF-1 EF-5 ET-XXX	P - P	NO NO NO
02-WMO-726	3	BF	6.00	MO	K/6	C	O	3	A	B	EF-1 EF-5 ET-XXX	EF-1 EF-5 ET-XXX	P - P	NO NO NO
02-WMO-728	3	BF	6.00	MO	L/6	C	O	3	A	B	EF-1 EF-5 ET-XXX	EF-1 EF-5 ET-XXX	P - P	NO NO NO
02-WMO-734	3	BF	16.00	MO	H/3	O/C	O	3	A	B	EF-1 EF-5 ET-XXX	EF-1 EF-5 ET-XXX	P - P	NO NO NO

5
2
3

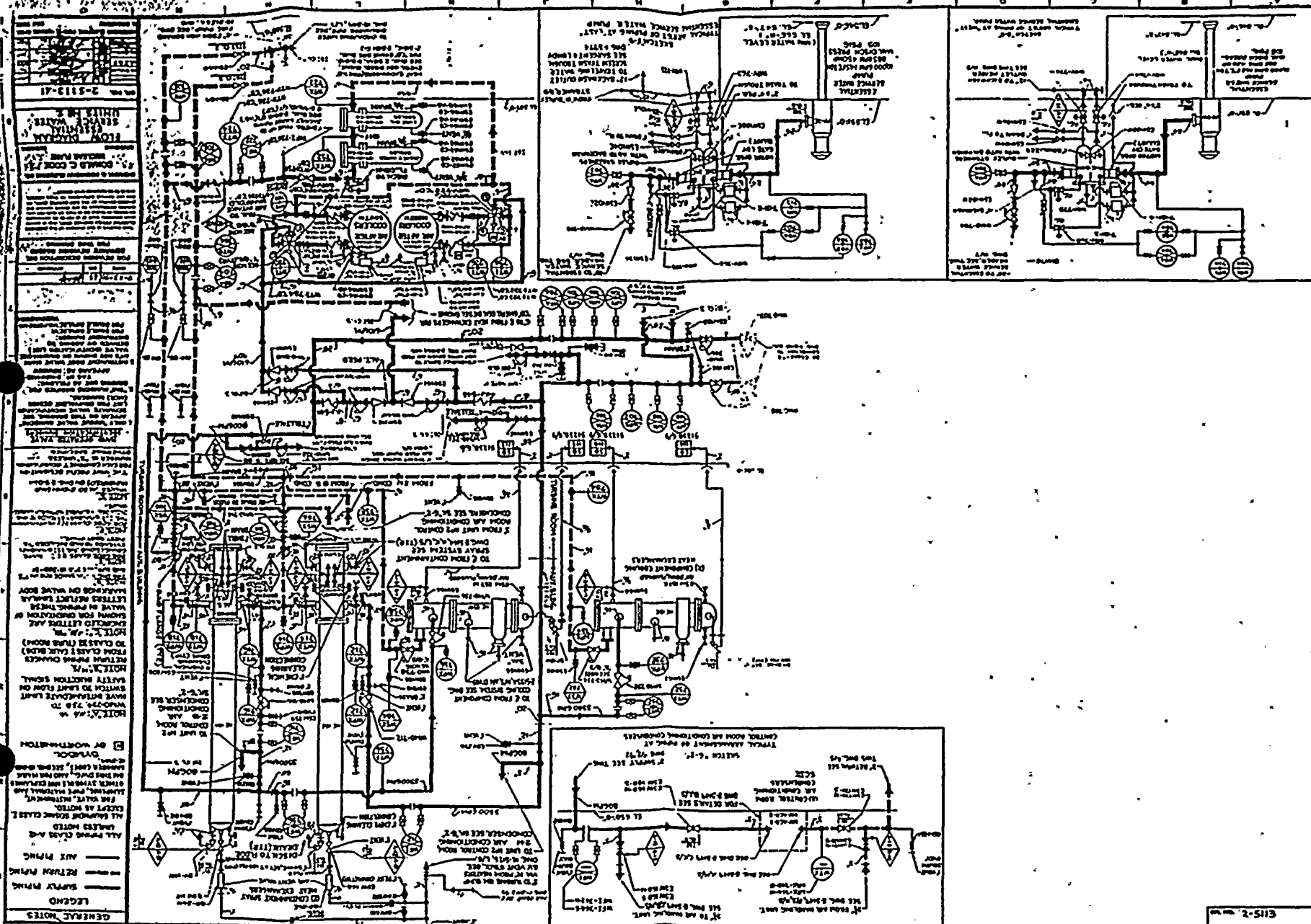


DONALD C. COOK NUCLEAR PLANT
SECOND TEN YEAR INTERVAL
VALVE SUMMARY SHEET - UNIT 02
FLOW DIAGRAM: 2-5113-41

4/2/91 16:35

SYSTEM: ESSENTIAL SERVICE WATER

VALVE						VALVE POSITION		ASME SECTION XI						
Number	Revision	Type	Size	Actuator Type	P&ID Coordinates	Power Operation	Safety Function	Code Class	Active/Passive	Category	Primary Test Required	Test Performed	Test Mode	Relief Request(s)
02-WMO-738	3	BF	16.00	MO	K/3	O/C	O	3	A	B	EF-1 EF-5 ET-XXX	EF-1 EF-5 ET-XXX	P - P	NO NO NO
02-WMO-744	3	BF	4.00	MO	J/6	C	O	3	A	B	EF-1 EF-5 ET-XXX	EF-1 EF-5 ET-XXX	P - P	NO NO NO
02-WMO-753	3	BF	6.00	MO	H/5	C	O	3	A	B	EF-1 EF-5 ET-XXX	EF-1 EF-5 ET-XXX	P - P	NO NO NO
02-WMO-754	3	BF	4.00	MO	K/6	C	O	3	A	B	EF-1 EF-5 ET-XXX	EF-1 EF-5 ET-XXX	P - P	NO NO NO
02-WRV-722-CD	3	3W	4.00	A	K/8	O	O	3	A	B	EF-1 EF-7 ET-XXX	NOTE 3 EF-8 NOTE 3	P R -	YES, NOTE 3 YES, NOTE 3 YES, NOTE 3
02-WRV-724-CD	3	3W	4.00	A	H/8	O	O	3	A	B	EF-1 EF-7 ET-XXX	NOTE 3 EF-8 NOTE 3	P R -	YES, NOTE 3 YES, NOTE 3 YES, NOTE 3
02-WRV-726-AB	3	3W	4.00	A	K/8	O	O	3	A	B	EF-1 EF-7 ET-XXX	NOTE 3 EF-8 NOTE 3	P R -	YES, NOTE 3 YES, NOTE 3 YES, NOTE 3
02-WRV-728-AB	3	3W	4.00	A	H/8	O	O	3	A	B	EF-1 EF-7 ET-XXX	NOTE 3 EF-8 NOTE 3	P R -	YES, NOTE 3 YES, NOTE 3 YES, NOTE 3



ATTACHMENT 2

FEBRUARY 16, 1990 SUBMITTAL INFORMATION

DONALD C. COOK NUCLEAR PLANT

VALVE TEST PROGRAM

RELIEF REQUEST NOTES

Flow Diagram No: 1-5143-36

Revision No: 3

Date: 2-5-90

NOTE 5: SI-166-1 through 4 (Code Relief): These check valves function to prevent backflow from the RCS into the accumulators during normal operation. These valves function to supply flow from the accumulators to the RCS during an accident condition. These valves cannot be exercised during power operation because the accumulators do not have sufficient head to overcome RCS pressure.

These valves cannot be exercised during cold shutdown because this would result in a possible low temperature overpressurization of the RCS. Full stroke testing during refueling outages is not possible because of the resulting water surge into the reactor and the potential for high airborne radiation contamination. These valves will be part stroke exercised at refueling frequency. The valves will be disassembled, manually full stroke exercised and visually examined on a sampling basis (one of four) per GL-89-04, Attachment 1, Item #2, at refueling frequency.

NOTE 6: SI-161, L1, L2, L3, L4 (Code Relief): These check valves are located in the supply lines from the Residual Heat Removal and Safety Injection Pumps to the RCS cold legs (loop 1 through 4). These valves cannot be exercised during power operation because the RHR pumps and SI pumps do not develop sufficient head to overcome RCS pressure. Full stroke of these valves (individually) cannot be verified at cold shutdown frequency because flow instrumentation is not available downstream of the flow split. These valves will be part stroke exercised at cold shutdown frequency and full stroke will be locally verified using portable instrumentation at refueling frequency.

DONALD C. COOK NUCLEAR PLANT

VALVE TEST PROGRAM

RELIEF REQUEST NOTES

Flow Diagram No: 1-5143-36

Revision No: 3

Date: 2-5-90

NOTE 10: SI-152 N, S (Code Relief): These check valves function to provide Safety Injection pump discharge to either the hot or cold legs. These valves cannot be exercised during power operation because the SI pumps do not develop sufficient pressure to overcome RCS pressure. These valves cannot be exercised during cold shutdown because the safety injection pumps are required to be inoperable by Technical Specification Section 3.5.3, to protect against low temperature overpressurization of the reactor vessel. Also, during cold shutdown, there may not be sufficient volume in the RCS to accommodate the amount of water needed to full stroke. These valves will be full stroke exercised at refueling frequency.

NOTE 11: SI-158 L1, L2, L3, L4 (Code Relief): Check valves SI-158 are located in the supply lines from the Residual Heat Removal and Safety Injection Pumps to the RCS hot legs (loop 1 through 4). These valves cannot be exercised during power operation because the RHR and SI pumps do not develop sufficient head to overcome RCS pressure. Full stroke of these valves (individually) cannot be verified at cold shutdown frequency because flow instrumentation is not available downstream of the flow split. These valves will be part stroke exercised at cold shutdown frequency. Full stroke will be verified using portable instrumentation at refueling frequency.

DONALD C. COOK NUCLEAR PLANT
SECOND TEN YEAR INTERVAL
VALVE SUMMARY SHEET - UNIT 1
FLOW DIAGRAM: 1-5143-36

RUN DATE AND TIME: 15FEB90:16:07

SYSTEM NAME: EMERGENCY CORE COOLING - RHR

VALVE				VALVE POSITION				ASME SECTION XI						
NUMBER	REV	TYPE	SIZE	ACT TYPE	F.D. COORD	POWER OPER	SAFETY FUNCT	CD A/P CL	CAT	PRIM TEST REQUIRED	TEST PERFORMED	TEST MODE	RELIEF REQUEST(S)	
1-RH-108W	3	CK	8	SA	N/9	C	O	2	A	C	CF-1	CF-3	C	NO, CSJ 7
1-RH-133	3	CK	8	SA	C/5	C	C	1	P	AC	SLT-1	SLT-1	R	NO, NOTE 1
1-RH-134	3	CK	8	SA	C/5	C	C	1	P	AC	SLT-1	SLT-1	R	NO, NOTE 1
1-SI-148	3	CK	12	SA	G/7	C	O	2	A	C	CF-1	CF-3	-	YES, NOTE 8
1-SI-151-E	3	CK	8	SA	D/7	C	O	2	A	AC	CF-1 SLT-1	CF-2 SLT-1	C R	NO, CSJ 9 NO, NOTE 1
1-SI-151-W	3	CK	8	SA	D/7	C	O	2	A	AC	CF-1 SLT-1	CF-2 SLT-1	C R	NO, CSJ 9 NO, NOTE 1
1-SI-152-N	3	CK	4	SA	D/8	C	O	2	A	AC	CF-1 SLT-1	CF-2 SLT-1	R R	YES, NOTE 10 NO, NOTE 1
1-SI-152-S	3	CK	4	SA	D/7	C	O	2	A	AC	CF-1 SLT-1	CF-2 SLT-1	R R	YES, NOTE 10 NO, NOTE 1
1-SI-158-L1	3	CK	6	SA	B/8	C	O	1	A	AC	CF-1 SLT-1	CF-2 SLT-1	- R	YES, NOTE 11 NO, NOTE 1
1-SI-158-L2	3	CK	6	SA	B/7	C	O	1	A	AC	CF-1 SLT-1	CF-2 SLT-1	- R	YES, NOTE 11 NO, NOTE 1

DONALD C. COOK NUCLEAR PLANT
SECOND TEN YEAR INTERVAL
VALVE SUMMARY SHEET - UNIT 1
FLOW DIAGRAM: 1-5143-36

RUN DATE AND TIME: 15FEB90:16:07

SYSTEM NAME: EMERGENCY CORE COOLING - RHR

VALVE				VALVE POSITION				ASME SECTION XI						
NUMBER	REV	TYPE	SIZE	ACT TYPE	F.D. COORD	POWER OPER	SAFETY FUNCT	CD A/P ICL	CAT	PRIM TEST REQUIRED	TEST PERFORMED	TEST MODE	RELIEF REQUEST(S)	
1-SI-158-L3	3	CK	6	SA	B/7	C	0	1	A AC	CF-1 SLT-1	CF-2 SLT-1	- R	YES, NOTE 11	NO, NOTE 1
1-SI-158-L4	3	CK	6	SA	B/7	C	0	1	A AC	CF-1 SLT-1	CF-2 SLT-1	- R	YES, NOTE 11	NO, NOTE 1
1-SI-161-L1	3	CK	6	SA	B/6	C	0	1	A AC	CF-1 SLT-1	CF-2 SLT-1	- R	YES, NOTE 6	NO, NOTE 1
1-SI-161-L2	3	CK	6	SA	B/5	C	0	1	A AC	CF-1 SLT-1	CF-2 SLT-1	- R	YES, NOTE 6	NO, NOTE 1
1-SI-161-L3	3	CK	6	SA	B/5	C	0	1	A AC	CF-1 SLT-1	CF-2 SLT-1	- R	YES, NOTE 6	NO, NOTE 1
1-SI-161-L4	3	CK	6	SA	B/6	C	0	1	A AC	CF-1 SLT-1	CF-2 SLT-1	- R	YES, NOTE 6	NO, NOTE 1
1-SI-166-1	3	CK	10	SA	C/4	C	0	1	A AC	CF-1 SLT-1	CF-2 SLT-1	R R	YES, NOTE 5	NO, NOTE 1
1-SI-166-2	3	CK	10	SA	C/4	C	0	1	A AC	CF-1 SLT-1	CF-2 SLT-1	R R	YES, NOTE 5	NO, NOTE 1
1-SI-166-3	3	CK	10	SA	C/4	C	0	1	A AC	CF-1 SLT-1	CF-2 SLT-1	R R	YES, NOTE 5	NO, NOTE 1

VALVE TEST PROGRAM

RELIEF REQUEST NOTES

Flow Diagram No: 2-5143-35

Revision No: 3

Date: 2-5-90

NOTE 5: SI-166-1 through 4 (Code Relief): These check valves function to prevent backflow from the RCS into the accumulators during normal operation. These valves function to supply flow from the accumulators to the RCS during an accident condition. These valves cannot be exercised during power operation because the accumulators do not have sufficient head to overcome RCS pressure.

These valves cannot be exercised during cold shutdown because this would result in a possible low temperature overpressurization of the RCS. Full stroke testing during refueling outages is not possible because of the resulting water surge into the reactor and the potential for high airborne radiation contamination. These valves will be part stroke exercised at refueling frequency. The valves will be disassembled, manually full stroke exercised and visually examined on a sampling basis (one of four) per GL-89-04, Attachment 1, Item #2, at refueling frequency.

NOTE 6: SI-161, L1, L2, L3, L4 (Code Relief): These check valves are located in the supply lines from the Residual Heat Removal and Safety Injection Pumps to the RCS cold legs (loop 1 through 4). These valves cannot be exercised during power operation because the RHR pumps and SI pumps do not develop sufficient head to overcome RCS pressure. Full stroke of these valves (individually) cannot be verified at cold shutdown frequency because flow instrumentation is not available downstream of the flow split. These valves will be part stroke exercised at cold shutdown frequency and full stroke will be locally verified using portable instrumentation at refueling frequency.

DONALD C. COOK NUCLEAR PLANT

VALVE TEST PROGRAM

RELIEF REQUEST NOTES

Flow Diagram No: 2-5143-29

Revision No: 3

Date: 2-5-90

NOTE 10: SI-152 N, S (Code Relief): These check valves function to provide Safety Injection pump discharge to either the hot or cold legs. These valves cannot be exercised during power operation because the SI pumps do not develop sufficient pressure to overcome RCS pressure. These valves cannot be exercised during cold shutdown because the safety injection pumps are required to be inoperable by Technical Specification Section 3.5.3, to protect against low temperature overpressurization of the reactor vessel. Also, during cold shutdown, there may not be sufficient volume in the RCS to accommodate the amount of water needed to full stroke. These valves will be full stroke exercised at refueling frequency.

NOTE 11: SI-158 L1, L2, L3, L4 (Code Relief): Check valves SI-158 are located in the supply lines from the Residual Heat Removal and Safety Injection Pumps to the RCS hot legs (loop 1 through 4). These valves cannot be exercised during power operation because the RHR and SI pumps do not develop sufficient head to overcome RCS pressure. Full stroke of these valves (individually) cannot be verified at cold shutdown frequency because flow instrumentation is not available downstream of the flow split. These valves will be part stroke exercised at cold shutdown frequency. Full stroke will be verified using portable instrumentation at refueling frequency.

DONALD C. COOK NUCLEAR PLANT
SECOND TEN YEAR INTERVAL
VALVE SUMMARY SHEET - UNIT 2
FLOW DIAGRAM: 2-5143-35

RUN DATE AND TIME: 15FEB90:16:11

SYSTEM NAME: EMERGENCY CORE COOLING - RH/R

VALVE				VALVE POSITION				ASME SECTION XI						
NUMBER	REV	TYPE	SIZE	ACT TYPE	F.D. COORD	POWER OPER	SAFETY FUNCT	CD A/P ICL	CAT	PRIM TEST REQUIRED	TEST PERFORMED	TEST MODE	RELIEF REQUEST(S)	
2-RH-108W	3	CK	8	SA	N/9	C	0	2	A	C	CF-1	CF-3	C	NO, CSJ 7
2-RH-133	3	CK	8	SA	C/5	C	C	1	P	AC	SLT-1	SLT-1	R	NO, NOTE 1
2-RH-134	3	CK	8	SA	C/5	C	C	1	P	AC	SLT-1	SLT-1	R	NO, NOTE 1
2-SI-148	3	CK	12	SA	G/7	C	0	2	A	C	CF-1	CF-3	-	YES, NOTE 8
2-SI-151-E	3	CK	8	SA	D/7	C	0	2	A	AC	CF-1 SLT-1	CF-2 SLT-1	C R	NO, CSJ 9 NO, NOTE 1
2-SI-151-H	3	CK	8	SA	D/7	C	0	2	A	AC	CF-1 SLT-1	CF-2 SLT-1	C R	NO, CSJ 9 NO, NOTE 1
2-SI-152-N	3	CK	4	SA	D/8	C	0	2	A	AC	CF-1 SLT-1	CF-2 SLT-1	R R	YES, NOTE 10 NO, NOTE 1
2-SI-152-S	3	CK	4	SA	D/7	C	0	2	A	AC	CF-1 SLT-1	CF-2 SLT-1	R R	YES, NOTE 10 NO, NOTE 1
2-SI-158-L1	3	CK	6	SA	B/8	C	0	1	A	AC	CF-1 SLT-1	CF-2 SLT-1	- R	YES, NOTE 11 NO, NOTE 1
2-SI-158-L2	3	CK	6	SA	B/7	C	0	1	A	AC	CF-1 SLT-1	CF-2 SLT-1	- R	YES, NOTE 11 NO, NOTE 1

5/2/55



DONALD C. COOK NUCLEAR PLANT
SECOND TEN YEAR INTERVAL
VALVE SUMMARY SHEET - UNIT 2
FLOW DIAGRAM: 2-5143-35

RUN DATE AND TIME: 15FEB90:16:11

SYSTEM NAME: EMERGENCY CORE COOLING - RHR

VALVE				VALVE POSITION				ASME SECTION XI						
NUMBER	REV	TYPE	SIZE	ACT TYPE	F.D. COORD	POWER OPER	SAFETY FUNCT	CD CL	A/P	CAT	PRIM TEST REQUIRED	TEST PERFORMED	TEST MODE	RELIEF REQUEST(S)
2-SI-158-L3	3	CK	6	SA	B/7	C	O	1	A	AC	CF-1 SLT-1	CF-2 SLT-1	- R	YES, NOTE 11 NO, NOTE 1
2-SI-158-L4	3	CK	6	SA	B/7	C	O	1	A	AC	CF-1 SLT-1	CF-2 SLT-1	- R	YES, NOTE 11 NO, NOTE 1
2-SI-161-L1	3	CK	6	SA	B/6	C	O	1	A	AC	CF-1 SLT-1	CF-2 SLT-1	- R	YES, NOTE 6 NO, NOTE 1
2-SI-161-L2	3	CK	6	SA	B/5	C	O	1	A	AC	CF-1 SLT-1	CF-2 SLT-1	- R	YES, NOTE 6 NO, NOTE 1
2-SI-161-L3	3	CK	6	SA	B/5	C	O	1	A	AC	CF-1 SLT-1	CF-2 SLT-1	- R	YES, NOTE 6 NO, NOTE 1
2-SI-161-L4	3	CK	6	SA	B/6	C	O	1	A	AC	CF-1 SLT-1	CF-2 SLT-1	- R	YES, NOTE 6 NO, NOTE 1
2-SI-166-1	3	CK	10	SA	C/4	C	O	1	A	AC	CF-1 SLT-1	CF-2 SLT-1	R R	YES, NOTE 5 NO, NOTE 1
2-SI-166-2	3	CK	10	SA	C/4	C	O	1	A	AC	CF-1 SLT-1	CF-2 SLT-1	R R	YES, NOTE 5 NO, NOTE 1
2-SI-166-3	3	CK	10	SA	C/4	C	O	1	A	AC	CF-1 SLT-1	CF-2 SLT-1	R R	YES, NOTE 5 NO, NOTE 1

