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AUTH.NAME AUTHOR AFFILIATION
FITZPATRICK,E. Indiana Michigan Power Co. (formerly Indiana & Michigan Ele
RECIP.NAME RECIPIENT AFFILIATION
MURLEY,T.E. Office of Nuclear Reactor Regulation, Director (Post 870411

SUBJECT: Forwards summary of revs to ISI valve test program made to incorporate results of recently conducted program review.

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AEP:NRC:0969V

Donald C. Cook Nuclear Plant Units 1 and 2
Docket Nos. 50-315 and 50-316
License Nos. DPR-58 and DPR-74
ISI PROGRAM REVISIONS - REQUESTS FOR RELIEF

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

Attn: Dr. T. E. Murley

June 28, 1993

Dear Dr. Murley:

Reference: Letter, L. B. Marsh (NRC) to E. E. Fitzpatrick (IMCo) "In Service Testing (IST) Program Relief Requests, D. C. Cook Nuclear Plant Units 1 and 2," dated February 19, 1993.

This letter transmits revisions to the Donald C. Cook Nuclear Plant Inservice Inspection (ISI) Valve Test Program that were made to incorporate the results of recently conducted program reviews. A summary of the changes is given in Attachment A.

In some instances, it is not possible to comply with the requirements of ASME Section XI and regulatory relief, as allowed by 10 CFR 50.55 a(a)(3), is requested. This relief is required by the start of the Unit 1, 1994 refueling outage that is currently scheduled to begin February 5, 1994. Attachment B provides a listing of the valves for which regulatory relief is required together with those ISI program pages that provide the bases for the relief requests.

In addition to the relief requests for the valves which have been added to the program, permanent relief is requested for valves 1-ESW-111, -112, -113, -114 and 2-ESW-141, -142, -143, -144. Temporary relief was granted in the reference pending a study of

A047
1/1

the use of non-intrusive examinations for these valves. As noted in the attached relief requests, non-intrusive examinations are not considered to be feasible for these valves.

Attachment C to this letter contains the revised description of the ISI program for Units 1 and 2.

Sincerely,

E. E. Fitzpatrick
Vice President

gmd

Attachments

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

bc: S. J. Brewer
J. B. Kingseed
D. H. Malin
M. L. Horvath - Bridgman
J. B. Shinnock
W. G. Smith, Jr.
B. A. Wetzel, NRC - Washington, D.C.
AEP:NRC:0969V
DC-N-6015.1

Attachment A to AEP:NRC:0969V

Summary of ISI Valve Test Program Changes

ASME Section XI Valve Inservice Testing Program
Revision 4 Summary of Changes - May 7, 1993

ITEM	CHANGE	SUBMITTAL	REASON
1-CA-181N	DELETED	AEP:NRC:0969V	DESIGN CHANGES PER RFC-2895
1-CA-181S	DELETED	AEP:NRC:0969V	DESIGN CHANGES PER RFC-2895
1-CA-7042	ADDED	AEP:NRC:0969V	NEW EQUIPMENT PER MM-417
1-CA-7043	ADDED	AEP:NRC:0969V	NEW EQUIPMENT PER MM-417
1-CCW-176-E	REVISED ADDED	AEP:NRC:0969U AEP:NRC:0969V	ADDED CLOSED SAFETY FUNCTION ADDED COMMENT REGARDING TESTING WITH ALTERNATE PUMP OOS
1-CCW-176-W	REVISED ADDED	AEP:NRC:0969U AEP:NRC:0969V	ADDED CLOSED SAFETY FUNCTION ADDED COMMENT REGARDING TESTING WITH ALTERNATE PUMP OOS
1-CCW-224-1	ADDED	AEP:NRC:0969V	DETERMINED TO HAVE A CLOSED SAFETY FUNCTION, ADDED TO PROGRAM (RELIEF REQUESTED)
1-CCW-224-2	ADDED	AEP:NRC:0969V	DETERMINED TO HAVE A CLOSED SAFETY FUNCTION, ADDED TO PROGRAM (RELIEF REQUESTED)
1-CCW-224-3	ADDED	AEP:NRC:0969V	DETERMINED TO HAVE A CLOSED SAFETY FUNCTION, ADDED TO PROGRAM (RELIEF REQUESTED)
1-CCW-224-4	ADDED	AEP:NRC:0969V	DETERMINED TO HAVE A CLOSED SAFETY FUNCTION, ADDED TO PROGRAM (RELIEF REQUESTED)
1-CCW-225-1	ADDED	AEP:NRC:0969V	DETERMINED TO HAVE A CLOSED SAFETY FUNCTION, ADDED TO PROGRAM (RELIEF REQUESTED)
1-CCW-225-2	ADDED	AEP:NRC:0969V	DETERMINED TO HAVE A CLOSED SAFETY FUNCTION, ADDED TO PROGRAM (RELIEF REQUESTED)
1-CCW-225-3	ADDED	AEP:NRC:0969V	DETERMINED TO HAVE A CLOSED SAFETY FUNCTION, ADDED TO PROGRAM (RELIEF REQUESTED)
1-CCW-225-4	ADDED	AEP:NRC:0969V	DETERMINED TO HAVE A CLOSED SAFETY FUNCTION, ADDED TO PROGRAM (RELIEF REQUESTED)
1-CS-295	ADDED	AEP:NRC:0969V	ADDED TO IST PROGRAM PER WESTINGHOUSE NUCLEAR SAFETY ADVISORY LETTER, O/C SAFETY FUNCTION (RELIEF REQUESTED FOR CLOSED TESTING)
1-CS-415-1	REVISED ADDED	AEP:NRC:0969U AEP:NRC:0969V	ADDED CLOSED SAFETY FUNCTION ADDED COMMENT REGARDING TESTING WITH ALTERNATE PUMP OOS
1-CS-415-2	REVISED ADDED	AEP:NRC:0969U AEP:NRC:0969V	ADDED CLOSED SAFETY FUNCTION ADDED COMMENT REGARDING TESTING WITH ALTERNATE PUMP OOS
1-CTS-127-E	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION, REVISED RELIEF REQUEST
1-CTS-127-W	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION, REVISED RELIEF REQUEST
1-CTS-131-E	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION, REVISED RELIEF REQUEST
1-CTS-131-W	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION, REVISED RELIEF REQUEST
1-DF-108C	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION

ASME Section XI Valve Inservice Testing Program
Revision 4 Summary of Changes - May 7, 1993

ITEM	CHANGE	SUBMITTAL	REASON
1-DF-108C	ADDED	AEP:NRC:0969V	ADDED COMMENT REGARDING TESTING WITH ALTERNATE PUMP OOS
1-DF-109C	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION
	ADDED	AEP:NRC:0969V	ADDED COMMENT REGARDING TESTING WITH ALTERNATE PUMP OOS
1-DF-114A	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION
	REVISED	AEP:NRC:0969V	CORRECTED TAG FROM 1-DF-114C AND FLOW DIAGRAM REFERENCE
	ADDED		ADDED COMMENT REGARDING TESTING WITH ALTERNATE PUMP OOS
1-DF-115A	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION
	REVISED	AEP:NRC:0969V	CORRECTED TAG FROM 1-DF-115C AND FLOW DIAGRAM REFERENCE
	ADDED		ADDED COMMENT REGARDING TESTING WITH ALTERNATE PUMP OOS
1-DG-127A	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION
	REVISED	AEP:NRC:0969V	ADDED RELIEF REQUEST
1-DG-127C	REVISED	AEP:NRC:0968U	ADDED CLOSED SAFETY FUNCTION
	REVISED	AEP:NRC:0969V	ADDED RELIEF REQUEST
1-DG-129A	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION
	REVISED	AEP:NRC:0969V	ADDED RELIEF REQUEST
1-DG-129C	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION
	REVISED	AEP:NRC:0969V	ADDED RELIEF REQUEST
1-DG-151A	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION AND COMMENT
	REVISED	AEP:NRC:0969V	REVISES COMMENT
1-DG-151C	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION AND COMMENT
	REVISED	AEP:NRC:0969V	REVISED COMMENT
1-DG-153A	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION AND COMMENT
	REVISED	AEP:NRC:0969V	REVISED COMMENT
1-DG-153C	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION AND COMMENT
	REVISED	AEP:NRC:0969V	REVISED COMMENT
1-DL-115A	REVISED	AEP:NRC:0969V	ADDED COMMENT DOCUMENTING NO CLOSED SAFETY FUNCTION
1-DL-115C	REVISED	AEP:NRC:0969V	ADDED COMMENT DOCUMENTING NO CLOSED SAFETY FUNCTION
1-ESW-101E	REVISED	AEP:NRC:0969S	ADDED CLOSED SAFETY FUNCTION AND COMMENT
1-ESW-101W	REVISED	AEP:NRC:0969S	ADDED CLOSED SAFETY FUNCTION AND COMMENT
1-ESW-111	REVISED	AEP:NRC:0969S	ADDED CLOSED SAFETY FUNCTION AND RELIEF REQUEST
	REVISED	AEP:NRC:0969V	REVISED RELIEF REQUEST TO REQUEST PERMANENT RELIEF
1-ESW-112	REVISED	AEP:NRC:0969S	ADDED CLOSED SAFETY FUNCTION AND RELIEF REQUEST
	REVISED	AEP:NRC:0969V	REVISED RELIEF REQUEST TO REQUEST PERMANENT RELIEF
1-ESW-113	REVISED	AEP:NRC:0969S	ADDED CLOSED SAFETY FUNCTION AND RELIEF REQUEST
	REVISED	AEP:NRC:0969V	REVISED RELIEF REQUEST TO REQUEST PERMANENT RELIEF
1-ESW-114	REVISED	AEP:NRC:0969S	ADDED CLOSED SAFETY FUNCTION AND RELIEF REQUEST
	REVISED	AEP:NRC:0969V	REVISED RELIEF REQUEST TO REQUEST PERMANENT RELIEF

ASME Section XI Valve Inservice Testing Program
Revision 4 Summary of Changes - May 7, 1993

ITEM	CHANGE	SUBMITTAL	REASON
1-ICH-129	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-ICH-250	REVISED	AEP:NRC:0969V	COLD SHUTDOWN JUSTIFICATION REVISED TO COMMENT PER RFC-3050 DESIGN CHANGES
1-ICH-251	REVISED	AEP:NRC:0969V	COLD SHUTDOWN JUSTIFICATION REVISED TO COMMENT PER RFC-3050 DESIGN CHANGES
1-IRV-251	DELETED	AEP:NRC:0969V	DESIGN CHANGES PER RFC-3050
1-IRV-252	DELETED	AEP:NRC:0969V	DESIGN CHANGES PER RFC-3050
1-IRV-255	DELETED	AEP:NRC:0969V	DESIGN CHANGES PER RFC-3050
1-HRV-220	REVISED	AEP:NRC:0969V	CORRECTED "TEST MODE" COLUMN FROM P TO C
1-HRV-230	REVISED	AEP:NRC:0969V	CORRECTED "TEST MODE" COLUMN FROM P TO C
1-PA-342	REVISION	AEP:NRC:0969V	TYPOGRAPHICAL ERROR, TAG INCORRECT IN ATTACHMENT A
1-PCR-40	REVISED	AEP:NRC:0969V	CORRECTED "TEST.PERFORMED" COLUMN FROM ET-XX TO ET-XXX
1-QCR-300	REVISED	AEP:NRC:0969V	CORRECTED TYPO IN TABLE FOR TEST MODE FOR ET-XXX FROM "P" TO "C"
1-QCR-301	REVISED	AEP:NRC:0969V	CORRECTED TYPO IN TABLE FOR TEST MODE FOR ET-XXX FROM "P" TO "C"
1-RH-133	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-RH-134	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-RH-141	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION, REVISED RELIEF REQUEST
1-RH-142	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION, REVISED RELIEF REQUEST
1-SF-152	REVISION	AEP:NRC:0969V	TYPOGRAPHICAL ERROR, TAG INCORRECT IN ATTACHMENT A
1-SF-154	REVISION	AEP:NRC:0969V	TYPOGRAPHICAL ERROR, TAG INCORRECT IN ATTACHMENT A
1-SI-101	REVISED	AEP:NRC:0969V	CLOSED SAFETY FUNCTION ADDED, NEW RELIEF REQUEST WRITTEN
1-SI-110-N	REVISED	AEP:NRC:0969V	CLOSED SAFETY FUNCTION ADDED, RELIEF REQUEST REVISED
1-SI-110-S	REVISED	AEP:NRC:0969V	CLOSED SAFETY FUNCTION ADDED, RELIEF REQUEST REVISED
1-SI-126	DELETED	AEP:NRC:0969V	DESIGN CHANGES PER RFC-3050
1-SI-142-L1	REVISED	AEP:NRC:0969V	RELIEF REQUEST REVISED TO REFLECT RFC-3050 DESIGN CHANGES
1-SI-142-L2	REVISED	AEP:NRC:0969V	RELIEF REQUEST REVISED TO REFLECT RFC-3050 DESIGN CHANGES
1-SI-142-L3	REVISED	AEP:NRC:0969V	RELIEF REQUEST REVISED TO REFLECT RFC-3050 DESIGN CHANGES

ASME Section XI Valve Inservice Testing Program
Revision 4 Summary of Changes - May 7, 1993

ITEM	CHANGE	SUBMITTAL	REASON
1-SI-142-L4	REVISED	AEP:NRC:0969V	RELIEF REQUEST REVISED TO REFLECT RFC-3050 DESIGN CHANGES
1-SI-151-E	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-SI-151-W	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-SI-152-N	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-SI-152-S	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-SI-158-L1	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-SI-158-L2	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-SI-158-L3	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-SI-158-L4	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-SI-161-L1	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-SI-161-L2	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-SI-161-L3	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-SI-161-L4	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-SI-166-1	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-SI-166-2	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-SI-166-3	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-SI-166-4	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-SI-170-L1	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-SI-170-L2	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-SI-170-L3	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-SI-170-L4	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
1-SI-185	REVISED	AEP:NRC:0969V	CLOSED SAFETY FUNCTION ADDED, RELIEF REQUEST REVISED
1-SV-122-3	REVISED	AEP:NRC:0969V	TYPOGRAPHICAL ERROR, CHANGED TAG FROM SV-122-25B
1-SV-122-4	REVISED	AEP:NRC:0969V	TYPOGRAPHICAL ERROR, CHANGED TAG FROM SV-122-72B
1/2-5113	REVISED	AEP:NRC:0969S	REVISION NUMBER UPDATED
12-CCW-170	REVISED REVISED	AEP:NRC:0969U AEP:NRC:0969V	ADDED CLOSED SAFETY FUNCTION CHANGED NOTE NUMBER FROM 2 TO 3 FOR CONSISTENCY W/ UNIT 2
2-CA-181N	DELETED	AEP:NRC:0969V	DESIGN CHANGES PER RFC-2895

ASME Section XI Valve Inservice Testing Program
Revision 4 Summary of Changes - May 7, 1993

ITEM	CHANGE	SUBMITTAL	REASON
2-CA-181S	DELETED	AEP:NRC:0969V	DESIGN CHANGES PER RFC-2895
2-CA-7044	ADDED	AEP:NRC:0969V	NEW EQUIPMENT PER MM-417
2-CA-7045	ADDED	AEP:NRC:0969V	NEW EQUIPMENT PER MM-417
2-CCW-176-E	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION
	ADDED	AEP:NRC:0969V	ADDED COMMENT REGARDING TESTING WITH ALTERNATE PUMP OOS
2-CCW-176-W	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION
	ADDED	AEP:NRC:0969V	ADDED COMMENT REGARDING TESTING WITH ALTERNATE PUMP OOS
2-CCW-224-1	ADDED	AEP:NRC:0969V	DETERMINED TO HAVE A CLOSED SAFETY FUNCTION, ADDED TO PROGRAM (RELIEF REQUESTED)
2-CCW-224-2	ADDED	AEP:NRC:0969V	DETERMINED TO HAVE A CLOSED SAFETY FUNCTION, ADDED TO PROGRAM (RELIEF REQUESTED)
2-CCW-224-3	ADDED	AEP:NRC:0969V	DETERMINED TO HAVE A CLOSED SAFETY FUNCTION, ADDED TO PROGRAM (RELIEF REQUESTED)
2-CCW-224-4	ADDED	AEP:NRC:0969V	DETERMINED TO HAVE A CLOSED SAFETY FUNCTION, ADDED TO PROGRAM (RELIEF REQUESTED)
2-CCW-225-1	ADDED	AEP:NRC:0969V	DETERMINED TO HAVE A CLOSED SAFETY FUNCTION, ADDED TO PROGRAM (RELIEF REQUESTED)
2-CCW-225-2	ADDED	AEP:NRC:0969V	DETERMINED TO HAVE A CLOSED SAFETY FUNCTION, ADDED TO PROGRAM (RELIEF REQUESTED)
2-CCW-225-3	ADDED	AEP:NRC:0969V	DETERMINED TO HAVE A CLOSED SAFETY FUNCTION, ADDED TO PROGRAM (RELIEF REQUESTED)
2-CCW-225-4	ADDED	AEP:NRC:0969V	DETERMINED TO HAVE A CLOSED SAFETY FUNCTION, ADDED TO PROGRAM (RELIEF REQUESTED)
2-CS-295	ADDED	AEP:NRC:0969V	ADDED TO IST PROGRAM PER WESTINGHOUSE NUCLEAR SAFETY ADVISORY LETTER, O/C SAFETY FUNCTION (RELIEF REQUESTED FOR CLOSED TESTING)
2-CS-415-3	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION
	ADDED	AEP:NRC:0969V	ADDED COMMENT REGARDING TESTING WITH ALTERNATE PUMP OOS
2-CS-415-4	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION
	ADDED	AEP:NRC:0969V	ADDED COMMENT REGARDING TESTING WITH ALTERNATE PUMP OOS
2-CTS-127-E	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION, REVISED RELIEF REQUEST
2-CTS-127-W	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION, REVISED RELIEF REQUEST
2-CTS-131-E	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION, REVISED RELIEF REQUEST
2-CTS-131-W	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION, REVISED RELIEF REQUEST
2-DF-108A	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION
	ADDED	AEP:NRC:0969V	ADDED COMMENT REGARDING TESTING WITH ALTERNATE PUMP OOS

ASME Section XI Valve Inservice Testing Program
Revision 4 Summary of Changes - May 7, 1993

ITEM	CHANGE	SUBMITTAL	REASON
2-DF-109A	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION
	ADDED	AEP:NRC:0969V	ADDED COMMENT REGARDING TESTING WITH ALTERNATE PUMP OOS
2-DF-114C	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION
	ADDED	AEP:NRC:0969V	ADDED COMMENT REGARDING TESTING WITH ALTERNATE PUMP OOS
	REVISED		CORRECTED TAG FROM 2-DF-114A AND FLOW DIAGRAM REFERENCE
2-DF-115C	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION
	REVISED	AEP:NRC:0969V	CORRECTED TAG FROM 2-DF-115A AND FLOW DIAGRAM REFERENCE
	ADDED		ADDED COMMENT REGARDING TESTING WITH ALTERNATE PUMP OOS
2-DG-128A	REVISED	AEP:NRC:0969U	ADDEC CLOSED SAFETY FUNCTION
	REVISED	AEP:NRC:0969V	ADDED RELIEF REQUEST
2-DG-128C	REVISED	AEP:NRC:0968U	ADDED CLOSED SAFETY FUNCTION
	REVISED	AEP:NRC:0969V	ADDED RELIEF REQUEST
2-DG-130A	REVISED	AEP:NRC:0968U	ADDED CLOSED SAFETY FUNCTION
	REVISED	AEP:NRC:0969V	ADDED RELIEF REQUEST
2-DG-130C	REVISED	AEP:NRC:0968U	ADDED CLOSED SAFETY FUNCTION
	REVISED	AEP:NRC:0969V	ADDED RELIEF REQUEST
2-DG-152A	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION AND COMMENT
	REVISED	AEP:NRC:0969V	REVISED COMMENT
2-DG-152C	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION AND COMMENT
	REVISED	AEP:NRC:0969V	REVISED COMMENT
2-DG-154A	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION AND COMMENT
	REVISED	AEP:NRC:0969V	REVISED COMMENT
2-DG-154C	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION AND COMMENT
	REVISED	AEP:NRC:0969V	REVISED COMMENT
2-DL-116A	REVISED	AEP:NRC:0969V	ADDED COMMENT DOCUMENTING NO CLOSED SAFETY FUNCTION
2-DL-116C	REVISED	AEP:NRC:0969V	ADDED COMMENT DOCUMENTING NO CLOSED SAFETY FUNCTION
2-ECR-36	REVISED	AEP:NRC:0969V	CORRECTED TABLE ENTRY UNDER ET-XXX FROM "YES, CSJ 1" TO "NO, CSJ 1"
2-ESW-102E	REVISED	AEP:NRC:0969S	ADDED CLOSED SAFETY FUNCTION AND COMMENT
2-ESW-102W	REVISED	AEP:NRC:0969S	ADDED CLOSED SAFETY FUNCTION AND COMMENT
2-ESW-141	REVISED	AEP:NRC:0969S	ADDED CLOSED SAFETY FUNCTION AND RELIEF REQUEST
	REVISED	AEP:NRC:0969V	REVISED RELIEF REQUEST TO REQUEST PERMANENT RELIEF
2-ESW-142	REVISED	AEP:NRC:0969S	ADDED CLOSED SAFETY FUNCTION AND RELIEF REQUEST
	REVISED	AEP:NRC:0969V	REVISED RELIEF REQUEST TO REQUEST PERMANENT RELIEF
2-ESW-143	REVISED	AEP:NRC:0969S	ADDED CLOSED SAFETY FUNCTION AND RELIEF REQUEST
	REVISED	AEP:NRC:0969V	REVISED RELIEF REQUEST TO REQUEST PERMANENT RELIEF
2-ESW-144	REVISED	AEP:NRC:0969S	ADDED CLOSED SAFETY FUNCTION AND RELIEF REQUEST
	REVISED	AEP:NRC:0969V	REVISED RELIEF REQUEST TO REQUEST PERMANENT RELIEF

ASME Section XI Valve Inservice Testing Program
Revision 4 Summary of Changes - May 7, 1993

ITEM	CHANGE	SUBMITTAL	REASON
2-ICH-129	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
2-ICH-250	REVISED	AEP:NRC:0969V	COLD SHUTDOWN JUSTIFICATION REVISED TO COMMENT PER RFC-3050 DESIGN CHANGES
2-ICH-251	REVISED	AEP:NRC:0969V	COLD SHUTDOWN JUSTIFICATION REVISED TO COMMENT PER RFC-3050 DESIGN CHANGES
2-IRV-251	DELETED	AEP:NRC:0969V	DESIGN CHANGES PER RFC-3050
2-IRV-252	DELETED	AEP:NRC:0969V	DESIGN CHANGES PER RFC-3050
2-IRV-255	DELETED	AEP:NRC:0969V	DESIGN CHANGES PER RFC-3050
2-RH-133	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
2-RH-134	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
2-RH-141	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION, REVISED RELIEF REQUEST
2-RH-142	REVISED	AEP:NRC:0969U	ADDED CLOSED SAFETY FUNCTION, REVISED RELIEF REQUEST
2-SI-101	REVISED	AEP:NRC:0969V	CLOSED SAFETY FUNCTION ADDED, NEW RELIEF REQUEST WRITTEN
2-SI-110-N	REVISED	AEP:NRC:0969V	CLOSED SAFETY FUNCTION ADDED, RELIEF REQUEST REVISED
2-SI-110-S	REVISED	AEP:NRC:0969V	CLOSED SAFETY FUNCTION ADDED, RELIEF REQUEST REVISED
2-SI-126	DELETED	AEP:NRC:0969V	DESIGN CHANGES PER RFC-3050
2-SI-142-L1	REVISED	AEP:NRC:0969V	RELIEF REQUEST REVISED TO REFLECT RFC-3050 DESIGN CHANGES
2-SI-142-L2	REVISED	AEP:NRC:0969V	RELIEF REQUEST REVISED TO REFLECT RFC-3050 DESIGN CHANGES
2-SI-142-L3	REVISED	AEP:NRC:0969V	RELIEF REQUEST REVISED TO REFLECT RFC-3050 DESIGN CHANGES
2-SI-142-L4	REVISED	AEP:NRC:0969V	RELIEF REQUEST REVISED TO REFLECT RFC-3050 DESIGN CHANGES
2-SI-151-E	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
2-SI-151-W	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
2-SI-152-N	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
2-SI-152-S	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
2-SI-158-L1	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
2-SI-158-L2	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
2-SI-158-L3	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT

ASME Section XI Valve Inservice Testing Program
Revision 4 Summary of Changes - May 7, 1993

ITEM	CHANGE	SUBMITTAL	REASON
2-SI-158-L4	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
2-SI-161-L1	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
2-SI-161-L2	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
2-SI-161-L3	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
2-SI-161-L4	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
2-SI-166-1	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
2-SI-166-2	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
2-SI-166-3	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
2-SI-166-4	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
2-SI-170-L1	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
2-SI-170-L2	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
2-SI-170-L3	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
2-SI-170-L4	REVISED	AEP:NRC:0969S	CLARIFICATION OF TESTING REQUIREMENTS IN COMMENT
2-SI-185	REVISED	AEP:NRC:0969V	CLOSED SAFETY FUNCTION ADDED, RELIEF REQUEST REVISED
2-SV-122-23	REVISED	AEP:NRC:0969V	TYPOGRAPHICAL ERROR, CHANGED TAG FROM SV-122
2-SV-122-3	REVISED	AEP:NRC:0969V	TYPOGRAPHICAL ERROR, CHANGED TAG FROM SV-122-72B
2-SV-122-4	REVISED	AEP:NRC:0969V	TYPOGRAPHICAL ERROR, CHANGED TAG FROM SV-122-25B
SLT-2 TEST	REVISED DESCRIPTION	AEP:NRC:0969V	CLARIFICATION PER PLANT REQUEST
SLT-2A TEST	REVISED DESCRIPTION	AEP:NRC:0969V	CLARIFICATION PER PLANT REQUEST

Attachment B to AEP:NRC:0969V

Relief Requests

Valves for Which Relief is Requested

Unit 1	Unit 2
ESW-111, -112, -113, -114	ESW-141, -142, -143, -144
SI-185	SI-185
CS-295	CS-295
CCW-224-1, -2, -3, -4	CCW-224-1, -2, -3, -4
CCW-225-1, -2, -3, -4	CCW-225,-1, -2, -3, -4
SI-110N, -110S	SI-110N, -110S
SI-142 LI, L2, L3, L4	SI-142 LI, L2, L3, L4
SI-101	SI-101
DG-127A, -129A	DG-128A, -130A
DG-127C, -129C	DG-128C, -130C

DONALD C. COOK NUCLEAR PLANT

VALVE TEST PROGRAM

RELIEF REQUEST NOTES

Flow Diagram No: 1-5113-46

Revision No: 4

Date: 5-7-93

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. Temporary Code relief has been granted (SE transmitted under letter dated February 19, 1993 from L.B. Marsh to E.E. Fitzpatrick) to allow evaluation of non-intrusive examination (NIE) methods for these valves. Permanent relief is requested at this time on the basis that these valves are "duo disc" (two center shafted crescent-shaped disc halves) check valves, and NIE is not expected to yield meaningful results.

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: 1-5129-31

Revision No: 4

Date: 5-7-93

NOTE 9: QRV-251 (Code Relief): This air operated valve is used to regulate charging header flow to the reactor coolant system and seal water flow to the reactor coolant pump seals. The valve cannot be full-stroke exercised at power operation because it would interrupt the RCP seal injection flow and would also upset pressurizer level. The valve will be part-stroke exercised during power operation and full-stroke exercised at a cold shutdown frequency. The valve cannot be stroke timed because there is no local or remote position indicator available and cycle times are directly proportional to "how fast" the operator can turn the control knob. Therefore, meaningful stroke times are not achievable. The control scheme of this valve functions to remove air from the valve operator, which duplicates the fail-safe condition, resulting in the valve going to fail-safe (open) position. Therefore, the alternative testing proposed will consist of locally observing the valve during full-stroke testing for smooth operation and apparent problems which can affect the valve operation.

NOTE 10: SI-185 (Code Relief): This normally closed valve has an open safety function during transfer of charging pump suction from the VCT to the RWST and a closed safety function during recirculation by preventing containment sump water from entering the RWST (redundant with IMO-910, -911 which are closed by operator action during evolution of the suction transfer EOP). The open function of this valve cannot be tested during: (1) power operation without introducing a high concentration of boric acid in the RCS, or (2) cold shutdown because the only full flow path available is into the reactor coolant system and the system does not have sufficient volume to accommodate that flow without a possible low temperature overpressure condition. The active closed safety function (open to

Note 10 (continued)
admit RWST water then closed during recirculation) cannot be tested without opening the valve. The valve will be full-stroke exercised, with open and closed positions verified, at refueling frequency. Passive testing (disc will remain in its normally closed position) will be performed quarterly to further assess the ability of the valve to fulfill its closed safety function.

NOTE 11: CS-299E&W (Comment): See Attachment "A" for permissible seat leakage values.

NOTE 12: CS-295 (Code Relief): This normally open check valve is located in the Volume Control Tank (VCT) discharge to charging pump suction header and is downstream of the Reactor Coolant Pump (RCP) seal water return branch connection. Under certain conditions, this valve performs a safety related function during the recirculation phase of a LOCA by closing to prevent leakage of significant amounts of containment sump water back through the seal water heat exchanger circuit, ultimately preventing a leakage path outside of containment. Exercising the valve closed during normal plant operation would require securing the charging pumps which would interrupt charging/letdown flows as well as RCP seal injection. Loss of charging could result in loss of pressurizer level followed by a reactor trip. Testing this valve would require termination of seal injection flow. Seal injection flow is maintained continuously to cool and lubricate the RCP seals, and to prevent contaminants from the RCS from coming into contact with (and potentially damaging) the RCP seals and pump bearing. This valve has been disassembled and inspected under the SOER 86-03 Check Valve PM Program with no degradations found. This valve will be

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VALVE TEST PROGRAM

RELIEF REQUEST NOTES

Flow Diagram No: 1-5129-31

Revision No: 4

Date: 5-7-93

Note 12 (continued)
exercised in accordance with IWV-3522(a) at refueling frequency, and closed position verified by radiography or other non-intrusive means. If NIE does not yield conclusive results, the valve will be disassembled and inspected at refueling frequency.

Note 5 (continued)
This valve is controlled by an auto/manual station with auto input from the letdown heat exchanger outlet temperature sensor (QTC-302). The valve also trips closed from an SI signal via a solenoid valve. The valve will be full-stroke exercised quarterly using auto/manual station which will permit rapid cycling of this regulating valve resulting in minimal impact on letdown temperature. Meaningful stroke time data is not available since this valve does not have local or remote position indication.

Fail safe testing this valve closed requires a longer period of time than cycling the valve using the auto/manual station. The valve will be fail safe tested to its closed position at cold shutdown frequency with letdown flow out of service thus avoiding high letdown line temperatures that could cause flashing in the letdown heat exchanger and lifting of safety valves.

NOTE 6: CCW-224-1, -2, -3, -4, CCW-225-1, -2, -3, -4 (Code Relief): These 2-inch check valves are upstream of the Reactor Coolant Pump (RCP) thermal barrier heat exchanger. These valves cannot be tested during RCP operation without securing CCW flow to the thermal barrier heat exchanger, which could cause RCP failure. There is no adequate instrumentation upstream/downstream of these check valves, or method to establish reverse flow, for closure testing. These valves are Y-pattern "clamp seal" type piston check valves, and, due to their irregular geometry do not appear as good candidates for non-intrusive examination (NIE). These valves are currently included in the SOER 86-03 Check Valve PM Program. These valves will be disassembled, manually full-stroke exercised and visually examined on a sampling basis (two of the eight) at refueling

DONALD C. COOK NUCLEAR PLANT

VALVE TEST PROGRAM

RELIEF REQUEST NOTES

Flow Diagram No: 1-5135-35

Revision No: 4

Date: 5-7-93

Note 6 (continued)
frequency such that all valves will be examined no less frequently than once every fourth refueling outage (i.e., once every 6 years). Disassembly and inspection on a sampling basis is consistent with GL 89-04 Attachment 1 Position 2, but is not specifically addressed as an alternative to reverse flow testing (relief request is required).

DONALD C. COOK NUCLEAR PLANT

VALVE TEST PROGRAM

RELIEF REQUEST NOTES

Flow Diagram No: 1-5142-32

Revision No: 4

Date: 5-7-93

NOTE 1: ICM-250 and ICM-251 (Comment): The previously submitted cold shutdown justification is no longer applicable due to configuration changes in the system (RFC-3050). These valves will be tested in accordance with the Code.

NOTE 2: ICM-250, -251, -260 and -265 (Code Relief): See Attachment "A" for permissible seat leakage values.

NOTE 3: IMO-261 (Cold Shutdown Justification): This valve cannot be tested when SI pumps are required to be operable. Testing would result in isolation of the common suction line to both SI trains. This valve will be stroke tested and timed at cold shutdown frequency.

NOTE 4: IMO-262 and -263 (Cold Shutdown Justification): These motor operated valves are located in series in the re-circulation line of the Safety Injection pumps. Exercising either of these valves will make both SI pumps inoperable. These valves will be full-stroke exercised and timed at cold shutdown frequency when SI pumps are not required to be operable.

NOTE 5: SI-110N, -110S (Code Relief): Safety Injection (SI) pump discharge valves, SI-110N and -110S, cannot be exercised during power operation because the SI pumps cannot overcome reactor coolant system pressure. Therefore, no flow path exists and, because minimum flow lines branch off upstream of these valves, they cannot be part-stroke tested during pump testing. These valves cannot be exercised during cold shutdown because the SI pumps are required to be inoperable by Technical Specification 3.5.3 to protect against low temperature overpressurization of the reactor. These valves

Note 5 (continued)
will be full-stroke exercised, with open and closed positions verified, at refueling frequency.

NOTE 6: SI-142 L1, L2, L3, and L4 (Code Relief): These check valves are located in the supply lines from the Boron Injection Tank to the reactor coolant cold legs (loop 1 through 4). These valves cannot be tested (full- or part-stroke) during power operation or cold shutdown because this would require injecting relatively cold RWST water with a higher boric acid concentration into the RCS, affecting reactivity and RCS inventory. These valves will be full-stroke exercised at refueling frequency.

NOTE 7: SI-101 (Code Relief): The common (SI pumps) suction check valve cannot be full-stroke exercised at power since the SI pumps cannot overcome reactor coolant system pressure, and full opening of SI-101 cannot be achieved with the SI pumps operating on minimum flow paths. SI-101 is part-stroke exercised at power operation during pump testing and full-stroke exercised at refueling frequency. Closure capability of the valve cannot be determined by flow or differential pressure measurements since instrumentation is not available and establishment of test conditions would isolate both SI pumps from their suction source and enter the unit into T/S 3/4.5.2. Consistent with the guidance of GL 89-04 Attachment 1 Position 2 and the response to Question 17 in the GL 89-04 Public Meeting Minutes, closure capability of the valve will be verified by disassembly and inspection. Since disassembly of this valve involves breaching a system containing contaminated water, the valve will be disassembled and inspected at an every third refueling outage frequency.

DONALD C. COOK NUCLEAR PLANT

VALVE TEST PROGRAM

RELIEF REQUEST NOTES

Flow Diagram No: 1-5151B-28

Revision No: 4

Date: 5-7-93

NOTE 6: DG-127A, -129A (Code Relief): These valves perform an open safety function to admit air, from alternate receivers, to the EDG "jet assist valve" (XRV-220), which provides an air boost to the diesel turbocharger during a fast start sequence. They perform a closed safety function by isolating the redundant air supply piping. These valves have no external position indication, instrumentation, or means of exercising. They can only be exercised during a fast start of the EDG (when jet assist is used). To test these valves to Code requirements, each EDG would require two fast starts (air supplied from alternate receivers) each quarter. Each EDG is subject to a fast start sequence once per 184 days per Technical Specification 4.8.1.1.2. As discussed in this T/S, starting at reduced acceleration rates is recommended by the manufacturer so that mechanical stress and wear on the diesel engine are minimized. Proposed testing is to verify one valve open and the alternate closed during a fast start surveillance, and to verify the alternate position on the subsequent fast start (184 days later) through use of the alternate air receiver. In this manner, each valve will be stroked to both positions once per year, and the number of EDG fast starts will not be increased.

DONALD C. COOK NUCLEAR PLANT

VALVE TEST PROGRAM

RELIEF REQUEST NOTES

Flow Diagram No: 1-5151D-28

Revision No: 4

Date: 5-7-93

NOTE 6: DG-127C, -129C (Code Relief): These valves perform an open safety function to admit air, from alternate receivers, to the EDG "jet assist valve" (XRV-225), which provides an air boost to the diesel turbocharger during a fast start sequence. They perform a closed safety function by isolating the redundant air supply piping. These valves have no external position indication, instrumentation, or means of exercising. They can only be exercised during a fast start of the EDG (when jet assist is used). To test these valves to Code requirements, each EDG would require two fast starts (air supplied from alternate receivers) each quarter. Each EDG is subject to a fast start sequence once per 184 days per Technical Specification 4.8.1.1.2. As discussed in this T/S, starting at reduced acceleration rates is recommended by the manufacturer so that mechanical stress and wear on the diesel engine are minimized. Proposed testing is to verify one valve open and the alternate closed during a fast start surveillance, and to verify the alternate position on the subsequent fast start (184 days later) through use of the alternate air receiver. In this manner, each valve will be stroked to both positions once per year, and the number of EDG fast starts will not be increased.

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VALVE TEST PROGRAM

RELIEF REQUEST NOTES

Flow Diagram No: 2-5113-41

Revision No: 4

Date: 5-7-93

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. Temporary Code relief has been granted (SE transmitted under letter dated February 19, 1993 from L.B. Marsh to E.E. Fitzpatrick) to allow evaluation of non-intrusive examination (NIE) methods for these valves. Permanent relief is requested at this time on the basis that these valves are "duo disc" (two center shafted crescent-shaped disc halves) check valves, and NIE is not expected to yield meaningful results.

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.

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VALVE TEST PROGRAM

RELIEF REQUEST NOTES

Flow Diagram No: 2-5129-32

Revision No: 4

Date: 5-7-93

NOTE 9: QRV-251 (Code Relief): This air operated valve is used to regulate charging header flow to the reactor coolant system and seal water flow to the reactor coolant pump seals. The valve cannot be full-stroke exercised at power operation because it would interrupt the RCP seal injection flow and would also upset pressurizer level. The valve will be part-stroke exercised during power operation and full-stroke exercised at a cold shutdown frequency. The valve cannot be stroke timed because there is no local or remote position indicator available and cycle times are directly proportional to "how fast" the operator can turn the control knob. Therefore, meaningful stroke times are not achievable. The control scheme of this valve functions to remove air from the valve operator, which duplicates the fail-safe condition, resulting in the valve going to fail-safe (open) position. Therefore, the alternative testing proposed will consist of locally observing the valve during full-stroke testing for smooth operation and apparent problems which can affect the valve operation.

NOTE 10: SI-185 (Code Relief): This normally closed valve has an open safety function during transfer of charging pump suction from the VCT to the RWST and a closed safety function during recirculation by preventing containment sump water from entering the RWST (redundant with IMO-910, -911 which are closed by operator action during evolution of the suction transfer EOP). The open function of this valve cannot be tested during: (1) power operation without introducing a high concentration of boric acid in the RCS, or (2) cold shutdown because the only full flow path available is into the reactor coolant system and the system does not have sufficient volume to accommodate that flow without a possible low temperature overpressure condition. The active closed safety function (open to

Note 10 (continued)
admit RWST water then closed during recirculation) cannot be tested without opening the valve. The valve will be full-stroke exercised, with open and closed positions verified, at refueling frequency. Passive testing (disc will remain in its normally closed position) will be performed quarterly to further assess the ability of the valve to fulfill its closed safety function.

NOTE 11: CS-299E&W (Comment): See Attachment "A" for permissible seat leakage values.

NOTE 12: CS-295 (Code Relief): This normally open check valve is located in the Volume Control Tank (VCT) discharge to charging pump suction header and is downstream of the Reactor Coolant Pump (RCP) seal water return branch connection. Under certain conditions, this valve performs a safety related function during the recirculation phase of a LOCA by closing to prevent leakage of significant amounts of containment sump water back through the seal water heat exchanger circuit, ultimately preventing a leakage path outside of containment. Exercising the valve closed during normal plant operation would require securing the charging pumps which would interrupt charging/letdown flows as well as RCP seal injection. Loss of charging could result in loss of pressurizer level followed by a reactor trip. Testing this valve would require termination of seal injection flow. Seal injection flow is maintained continuously to cool and lubricate the RCP seals, and to prevent contaminants from the RCS from coming into contact with (and potentially damaging) the RCP seals and pump bearing. This valve has been disassembled and inspected under the SOER 86-03 Check Valve PM Program with no degradations found. This valve will be

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VALVE TEST PROGRAM

RELIEF REQUEST NOTES

Flow Diagram No: 2-5129-32

Revision No: 4

Date: 5-7-93

Note 12 (continued)
exercised in accordance with IWV-3522(a) at refueling frequency, and closed position verified by radiography or other non-intrusive means. If NIE does not yield conclusive results, the valve will be disassembled and inspected at refueling frequency.

Note 5 (continued)
This valve is controlled by an auto/manual station with auto input from the letdown heat exchanger outlet temperature sensor (QTC-302). The valve also trips closed from an SI signal via a solenoid valve. The valve will be full-stroke exercised quarterly using auto/manual station which will permit rapid cycling of this regulating valve resulting in minimal impact on letdown temperature. Meaningful stroke time data is not available since this valve does not have local or remote position indication.

Fail safe testing this valve closed requires a longer period of time than cycling the valve using the auto/manual station. The valve will be fail safe tested to its closed position at cold shutdown frequency with letdown flow out of service thus avoiding high letdown line temperatures that could cause flashing in the letdown heat exchanger and lifting of safety valves.

NOTE 6: CCW-224-1, -2, -3, -4, CCW-225-1, -2, -3, -4 (Code Relief): These 2-inch check valves are upstream of the Reactor Coolant Pump (RCP) thermal barrier heat exchanger. These valves cannot be tested during RCP operation without securing CCW flow to the thermal barrier heat exchanger, which could cause RCP failure. There is no adequate instrumentation upstream/downstream of these check valves, or method to establish reverse flow, for closure testing. These valves are Y-pattern "clamp seal" type piston check valves, and, due to their irregular geometry do not appear as good candidates for non-intrusive examination (NIE). These valves are currently included in the SOER 86-03 Check Valve PM Program. These valves will be disassembled, manually full-stroke exercised and visually examined on a sampling basis (two of the eight) at refueling

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VALVE TEST PROGRAM

RELIEF REQUEST NOTES

Flow Diagram No: 2-5135-34

Revision No: 4

Date: 5-7-93

Note 6 (continued)
frequency such that all valves will be examined no less frequently than once every fourth refueling outage (i.e., once every 6 years). Disassembly and inspection on a sampling basis is consistent with GL 89-04 Attachment 1 Position 2, but is not specifically addressed as an alternative to reverse flow testing (relief request is required).

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VALVE TEST PROGRAM

RELIEF REQUEST NOTES

Flow Diagram No: 2-5142-35

Revision No: 4

Date: 5-7-93

NOTE 1: ICM-250 and ICM-251 (Comment): The previously submitted cold shutdown justification is no longer applicable due to configuration changes in the system (REC-3050). These valves will be tested in accordance with the Code.

NOTE 2: ICM-250, -251, -260 and -265 (Code Relief): See Attachment "A" for permissible seat leakage values.

NOTE 3: IMO-261 (Cold Shutdown Justification): This valve cannot be tested when SI pumps are required to be operable. Testing would result in isolation of the common suction line to both SI trains. This valve will be stroke tested and timed at cold shutdown frequency.

NOTE 4: IMO-262 and -263 (Cold Shutdown Justification): These motor operated valves are located in series in the re-circulation line of the Safety Injection pumps. Exercising either of these valves will make both SI pumps inoperable. These valves will be full-stroke exercised and timed at cold shutdown frequency when SI pumps are not required to be operable.

NOTE 5: SI-110N, -110S (Code Relief): Safety Injection (SI) pump discharge valves, SI-110N and -110S, cannot be exercised during power operation because the SI pumps cannot overcome reactor coolant system pressure. Therefore, no flow path exists and, because minimum flow lines branch off upstream of these valves, they cannot be part-stroke tested during pump testing. These valves cannot be exercised during cold shutdown because the SI pumps are required to be inoperable by Technical Specification 3.5.3 to protect against low temperature overpressurization of the reactor. These valves

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VALVE TEST PROGRAM

RELIEF REQUEST NOTES

Flow Diagram No: 2-5142-35

Revision No: 4

Date: 5-7-93

Note 5 (continued)
will be full-stroke exercised, with open and closed positions verified, at refueling frequency.

NOTE 6: SI-142 L1, L2, L3, and L4 (Code Relief): These check valves are located in the supply lines from the Boron Injection Tank to the reactor coolant cold legs (loop 1 through 4). These valves cannot be tested (full- or part-stroke) during power operation or cold shutdown because this would require injecting relatively cold RWST water with a higher boric acid concentration into the RCS, affecting reactivity and RCS inventory. These valves will be full-stroke exercised at refueling frequency.

NOTE 7: SI-101 (Code Relief): The common (SI pumps) suction check valve cannot be full-stroke exercised at power since the SI pumps cannot overcome reactor coolant system pressure, and full opening of SI-101 cannot be achieved with the SI pumps operating on minimum flow paths. SI-101 is part-stroke exercised at power operation during pump testing and full-stroke exercised at refueling frequency. Closure capability of the valve cannot be determined by flow or differential pressure measurements since instrumentation is not available and establishment of test conditions would isolate both SI pumps from their suction source and enter the unit into T/S 3/4.5.2. Consistent with the guidance of GL 89-04 Attachment 1 Position 2 and the response to Question 17 in the GL 89-04 Public Meeting Minutes, closure capability of the valve will be verified by disassembly and inspection. Since disassembly of this valve involves breaching a system containing contaminated water, the valve will be disassembled and inspected at an every third refueling outage frequency.

DONALD C. COOK NUCLEAR PLANT

VALVE TEST PROGRAM

RELIEF REQUEST NOTES

Flow Diagram No: 2-5151B-27

Revision No: 4

Date: 5-7-93

NOTE 6: DG-128A, -130A (Code Relief): These valves perform an open safety function to admit air, from alternate receivers, to the EDG "jet assist valve" (XRV-220), which provides an air boost to the diesel turbocharger during a fast start sequence. They perform a closed safety function by isolating the redundant air supply piping. These valves have no external position indication, instrumentation, or means of exercising. They can only be exercised during a fast start of the EDG (when jet assist is used). To test these valves to Code requirements, each EDG would require two fast starts (air supplied from alternate receivers) each quarter. Each EDG is subject to a fast start sequence once per 184 days per Technical Specification 4.8.1.1.2. As discussed in this T/S, starting at reduced acceleration rates is recommended by the manufacturer so that mechanical stress and wear on the diesel engine are minimized. Proposed testing is to verify one valve open and the alternate closed during a fast start surveillance, and to verify the alternate position on the subsequent fast start (184 days later) through use of the alternate air receiver. In this manner, each valve will be stroked to both positions once per year, and the number of EDG fast starts will not be increased.

DONALD C. COOK NUCLEAR PLANT

VALVE TEST PROGRAM

RELIEF REQUEST NOTES

Flow Diagram No: 2-5151D-27

Revision No: 4

Date: 5-7-93

NOTE 6: DG-128C, -130C (Code Relief): These valves perform an open safety function to admit air, from alternate receivers, to the EDG "jet assist valve" (XRV-225), which provides an air boost to the diesel turbocharger during a fast start sequence. They perform a closed safety function by isolating the redundant air supply piping. These valves have no external position indication, instrumentation, or means of exercising. They can only be exercised during a fast start of the EDG (when jet assist is used). To test these valves to Code requirements, each EDG would require two fast starts (air supplied from alternate receivers) each quarter. Each EDG is subject to a fast start sequence once per 184 days per Technical Specification 4.8.1.1.2. As discussed in this T/S, starting at reduced acceleration rates is recommended by the manufacturer so that mechanical stress and wear on the diesel engine are minimized. Proposed testing is to verify one valve open and the alternate closed during a fast start surveillance, and to verify the alternate position on the subsequent fast start (184 days later) through use of the alternate air receiver. In this manner, each valve will be stroked to both positions once per year, and the number of EDG fast starts will not be increased.

Attachment C to AEP:NRC:0969V

Revised ISI Valve Test Program