

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:8412180281 DOC.DATE: 84/12/13 NOTARIZED: YES DOCKET #  
 FACIL:50-410 Nine Mile Point Nuclear Station, Unit 2, Niagara Moho 05000410  
 AUTH.NAME AUTHOR AFFILIATION  
 MANGAN,C.V. Niagara Mohawk Power Corp.  
 RECIP.NAME RECIPIENT AFFILIATION  
 SCHWENCER,A. Licensing Branch 2

SUBJECT: Forwards revised test abstracts for svc & instrument air sys  
 & reactor bldg polar crane. Info will be included in FSAR  
 Amend 17.

DISTRIBUTION CODE: B001D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 9  
 TITLE: Licensing Submittal: PSAR/FSAR Amdts & Related Correspondence

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	NRR/DL/ADL	1 0	NRR LB2 BC	1 0
	NRR LB2 LA	1 0	HAUGHEY,M 01	1 1
INTERNAL:	ACRS 41	6 6	ADM/LFMB	1 0
	ELD/HDS3	1 0	IE FILE	1 1
	IE/DEPER/EPB 36	1 1	IE/DEPER/IRB 35	1 1
	IE/DQASIP/QAB21	1 1	NRR ROE,M.L	1 1
	NRR/DE/AEAB	1 0	NRR/DE/CEB 11	1 1
	NRR/DE/EHEB	1 1	NRR/DE/EOB 13	2 2
	NRR/DE/GB 28	2 2	NRR/DE/MEB 18	1 1
	NRR/DE/MTEB 17	1 1	NRR/DE/SAB 24	1 1
	NRR/DE/SGEB 25	1 1	NRR/DHFS/HFEB40	1 1
	NRR/DHFS/LQB 32	1 1	NRR/DHFS/PSRB	1 1
	NRR/DL/SSPB	1 0	NRR/DSI/AEB 26	1 1
	NRR/DSI/ASB	1 1	NRR/DSI/CPB 10	1 1
	NRR/DSI/CSB 09	1 1	NRR/DSI/ICSB 16	1 1
	NRR/DSI/METB 12	1 1	NRR/DSI/PSB 19	1 1
	<del>NRR/DSI/RAB</del> 22	1 1	NRR/DSI/RSB 23	1 1
	REG FILE 04	1 1	RGN1	3 3
	RM/DDAMI/MIB	1 0		
EXTERNAL:	BNL (AMDTs ONLY)	1 1	DMB/DSS (AMDTs)	1 1
	FEMA-REP DIV 39	1 1	LPDR 03	1 1
	NRC PDR 02	1 1	NSIC 05	1 1
	NTIS	1 1	PNL GRUEL,R	1 1



1. The first part of the document is a list of names and addresses, including:
   
 Mr. J. H. Smith, 123 Main St., New York, N.Y.
   
 Mr. J. D. Jones, 456 Elm St., Chicago, Ill.
   
 Mr. W. E. Brown, 789 Oak St., Boston, Mass.
   
 Mr. R. L. Green, 101 Pine St., Philadelphia, Pa.
   
 Mr. S. K. White, 202 Cedar St., St. Louis, Mo.
   
 Mr. T. M. Black, 303 Maple St., Pittsburgh, Pa.
   
 Mr. U. N. Gray, 404 Birch St., Cincinnati, Ohio.

2. The second part of the document is a list of names and addresses, including:
   
 Mr. V. P. Blue, 505 Spruce St., Portland, Me.
   
 Mr. Q. R. Yellow, 606 Ash St., San Francisco, Cal.
   
 Mr. P. S. Purple, 707 Hickory St., Dallas, Tex.
   
 Mr. O. T. Red, 808 Walnut St., Kansas City, Mo.
   
 Mr. N. U. Orange, 909 Chestnut St., Denver, Colo.
   
 Mr. M. V. Green, 1010 Olive St., Salt Lake City, Utah.
   
 Mr. L. W. Blue, 1111 Elm St., Omaha, Neb.
   
 Mr. K. X. Yellow, 1212 Maple St., Minneapolis, Minn.
   
 Mr. J. Y. Purple, 1313 Birch St., St. Paul, Minn.
   
 Mr. I. Z. Red, 1414 Cedar St., Des Moines, Iowa.
   
 Mr. H. A. Orange, 1515 Pine St., Lincoln, Neb.
   
 Mr. G. B. Green, 1616 Spruce St., Omaha, Neb.
   
 Mr. F. C. Blue, 1717 Elm St., St. Paul, Minn.
   
 Mr. E. D. Yellow, 1818 Maple St., Minneapolis, Minn.
   
 Mr. D. E. Purple, 1919 Birch St., St. Paul, Minn.
   
 Mr. C. F. Red, 2020 Cedar St., Des Moines, Iowa.
   
 Mr. B. G. Orange, 2121 Pine St., Lincoln, Neb.
   
 Mr. A. H. Green, 2222 Spruce St., Omaha, Neb.
   
 Mr. Z. I. Blue, 2323 Elm St., St. Paul, Minn.
   
 Mr. Y. J. Yellow, 2424 Maple St., Minneapolis, Minn.
   
 Mr. X. K. Purple, 2525 Birch St., St. Paul, Minn.
   
 Mr. W. L. Red, 2626 Cedar St., Des Moines, Iowa.
   
 Mr. V. M. Orange, 2727 Pine St., Lincoln, Neb.
   
 Mr. U. N. Green, 2828 Spruce St., Omaha, Neb.
   
 Mr. T. O. Blue, 2929 Elm St., St. Paul, Minn.
   
 Mr. S. P. Yellow, 3030 Maple St., Minneapolis, Minn.
   
 Mr. R. Q. Purple, 3131 Birch St., St. Paul, Minn.
   
 Mr. P. R. Red, 3232 Cedar St., Des Moines, Iowa.
   
 Mr. O. S. Orange, 3333 Pine St., Lincoln, Neb.
   
 Mr. N. T. Green, 3434 Spruce St., Omaha, Neb.
   
 Mr. M. U. Blue, 3535 Elm St., St. Paul, Minn.
   
 Mr. L. V. Yellow, 3636 Maple St., Minneapolis, Minn.
   
 Mr. K. W. Purple, 3737 Birch St., St. Paul, Minn.
   
 Mr. J. X. Red, 3838 Cedar St., Des Moines, Iowa.
   
 Mr. I. Y. Orange, 3939 Pine St., Lincoln, Neb.
   
 Mr. H. Z. Green, 4040 Spruce St., Omaha, Neb.
   
 Mr. G. A. Blue, 4141 Elm St., St. Paul, Minn.
   
 Mr. F. B. Yellow, 4242 Maple St., Minneapolis, Minn.
   
 Mr. E. C. Purple, 4343 Birch St., St. Paul, Minn.
   
 Mr. D. F. Red, 4444 Cedar St., Des Moines, Iowa.
   
 Mr. C. G. Orange, 4545 Pine St., Lincoln, Neb.
   
 Mr. B. H. Green, 4646 Spruce St., Omaha, Neb.
   
 Mr. A. I. Blue, 4747 Elm St., St. Paul, Minn.
   
 Mr. Z. J. Yellow, 4848 Maple St., Minneapolis, Minn.
   
 Mr. Y. K. Purple, 4949 Birch St., St. Paul, Minn.
   
 Mr. X. L. Red, 5050 Cedar St., Des Moines, Iowa.
   
 Mr. W. M. Orange, 5151 Pine St., Lincoln, Neb.
   
 Mr. V. N. Green, 5252 Spruce St., Omaha, Neb.
   
 Mr. U. O. Blue, 5353 Elm St., St. Paul, Minn.
   
 Mr. T. P. Yellow, 5454 Maple St., Minneapolis, Minn.
   
 Mr. S. Q. Purple, 5555 Birch St., St. Paul, Minn.
   
 Mr. R. R. Red, 5656 Cedar St., Des Moines, Iowa.
   
 Mr. Q. S. Orange, 5757 Pine St., Lincoln, Neb.
   
 Mr. P. T. Green, 5858 Spruce St., Omaha, Neb.
   
 Mr. O. U. Blue, 5959 Elm St., St. Paul, Minn.
   
 Mr. N. V. Yellow, 6060 Maple St., Minneapolis, Minn.
   
 Mr. M. W. Purple, 6161 Birch St., St. Paul, Minn.
   
 Mr. L. X. Red, 6262 Cedar St., Des Moines, Iowa.
   
 Mr. K. Y. Orange, 6363 Pine St., Lincoln, Neb.
   
 Mr. J. Z. Green, 6464 Spruce St., Omaha, Neb.
   
 Mr. I. A. Blue, 6565 Elm St., St. Paul, Minn.
   
 Mr. H. B. Yellow, 6666 Maple St., Minneapolis, Minn.
   
 Mr. G. C. Purple, 6767 Birch St., St. Paul, Minn.
   
 Mr. F. D. Red, 6868 Cedar St., Des Moines, Iowa.
   
 Mr. E. E. Orange, 6969 Pine St., Lincoln, Neb.
   
 Mr. D. F. Green, 7070 Spruce St., Omaha, Neb.
   
 Mr. C. G. Blue, 7171 Elm St., St. Paul, Minn.
   
 Mr. B. H. Yellow, 7272 Maple St., Minneapolis, Minn.
   
 Mr. A. I. Purple, 7373 Birch St., St. Paul, Minn.
   
 Mr. Z. J. Red, 7474 Cedar St., Des Moines, Iowa.
   
 Mr. Y. K. Orange, 7575 Pine St., Lincoln, Neb.
   
 Mr. X. L. Green, 7676 Spruce St., Omaha, Neb.
   
 Mr. W. M. Blue, 7777 Elm St., St. Paul, Minn.
   
 Mr. V. N. Yellow, 7878 Maple St., Minneapolis, Minn.
   
 Mr. U. O. Purple, 7979 Birch St., St. Paul, Minn.
   
 Mr. T. P. Red, 8080 Cedar St., Des Moines, Iowa.
   
 Mr. S. Q. Orange, 8181 Pine St., Lincoln, Neb.
   
 Mr. R. R. Green, 8282 Spruce St., Omaha, Neb.
   
 Mr. Q. S. Blue, 8383 Elm St., St. Paul, Minn.
   
 Mr. P. T. Yellow, 8484 Maple St., Minneapolis, Minn.
   
 Mr. O. U. Purple, 8585 Birch St., St. Paul, Minn.
   
 Mr. N. V. Red, 8686 Cedar St., Des Moines, Iowa.
   
 Mr. M. W. Orange, 8787 Pine St., Lincoln, Neb.
   
 Mr. L. X. Green, 8888 Spruce St., Omaha, Neb.
   
 Mr. K. Y. Blue, 8989 Elm St., St. Paul, Minn.
   
 Mr. J. Z. Yellow, 9090 Maple St., Minneapolis, Minn.
   
 Mr. I. A. Purple, 9191 Birch St., St. Paul, Minn.
   
 Mr. H. B. Red, 9292 Cedar St., Des Moines, Iowa.
   
 Mr. G. C. Orange, 9393 Pine St., Lincoln, Neb.
   
 Mr. F. D. Green, 9494 Spruce St., Omaha, Neb.
   
 Mr. E. E. Blue, 9595 Elm St., St. Paul, Minn.
   
 Mr. D. F. Yellow, 9696 Maple St., Minneapolis, Minn.
   
 Mr. C. G. Purple, 9797 Birch St., St. Paul, Minn.
   
 Mr. B. H. Red, 9898 Cedar St., Des Moines, Iowa.
   
 Mr. A. I. Orange, 9999 Pine St., Lincoln, Neb.
   
 Mr. Z. J. Green, 10000 Spruce St., Omaha, Neb.

December 13, 1984  
(NMP2L 0292)

Mr. A. Schwencer, Chief  
Licensing Branch No. 2  
Division of Licensing  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

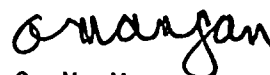
Dear Mr. Schwencer:

Re: Nine Mile Point Unit 2  
Docket No: 50-410

Attached are the revised test abstracts for the Service and Instrument Air System and the Reactor Building - Polar Crane as requested by the Nuclear Regulatory Commission reviewer.

This information will be included in Final Safety Analysis Report Amendment 17.

Very truly yours,



C. V. Mangan  
Vice President

Nuclear Engineering & Licensing

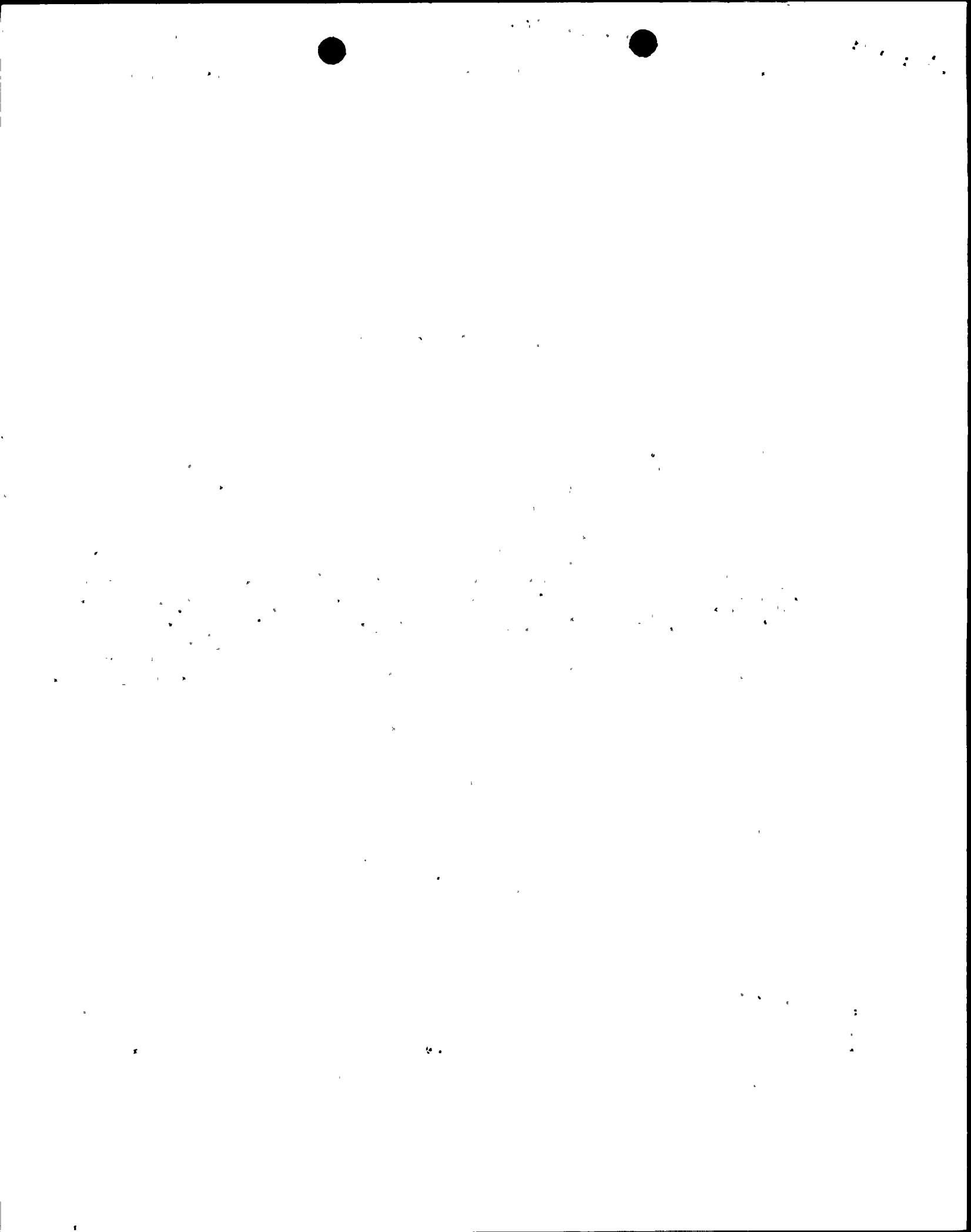
DS:ja

Attachment

xc: R. A. Gramm, NRC Resident Inspector  
Project File (2)

8412180281 841213  
PDR ADOCK 05000410  
PDR  
A

Bool  
1/1



UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of )  
Niagara Mohawk Power Corporation )  
(Nine Mile Point Unit 2) )

Docket No. 50-410

AFFIDAVIT

C. V. Mangan, being duly sworn, states that he is Vice President of Niagara Mohawk Power Corporation; that he is authorized on the part of said Corporation to sign and file with the Nuclear Regulatory Commission the documents attached hereto; and that all such documents are true and correct to the best of his knowledge, information and belief.

C. V. Mangan

Subscribed and sworn to before me, a Notary Public in and for the State of New York and County of Onondaga, this 13<sup>th</sup> day of December, 1984.

Christine Austin  
Notary Public in and for  
Onondaga County, New York

My Commission expires:

**CHRISTINE AUSTIN**  
Notary Public in the State of New York  
Qualified in Onondaga Co. No. 4787687  
My Commission Expires March 30, 1985

CHRISTINE AUSTIN  
Hotel Fable in the State of New York  
Printed in Canada by the  
Government of Ontario March 20, 1991

Nine Mile Point Unit 2 FSAR

TABLE 14.2-43

SERVICE AND INSTRUMENT AIR SYSTEM

System 19

Preoperational Test (N2-POT-19)

Test Objectives

1. To demonstrate the reliable operation of the service and instrument air systems and components.
2. To ensure the system is properly designed and constructed.
3. To evaluate the service and instrument air systems operating procedures.

Safety Precaution

Follow all NMPC safety rules and proper procedures during testing.

Prerequisites

1. All applicable preliminary tests are completed and approved.
2. All applicable motor control centers to supply electric power to motors, control circuits, and instrumentation are available.
3. All valve lineups are completed.

Test Procedure

1. The test procedure will verify that the instrument and service air system is capable of supplying the plant's compressed air requirements during normal operation.
2. The autostart feature of the compressors will be demonstrated.
3. The air compressor trip modes will be verified for various transients, simulated during testing.
4. Air compressor capacity and load time will be verified.



1 2 3 4 5

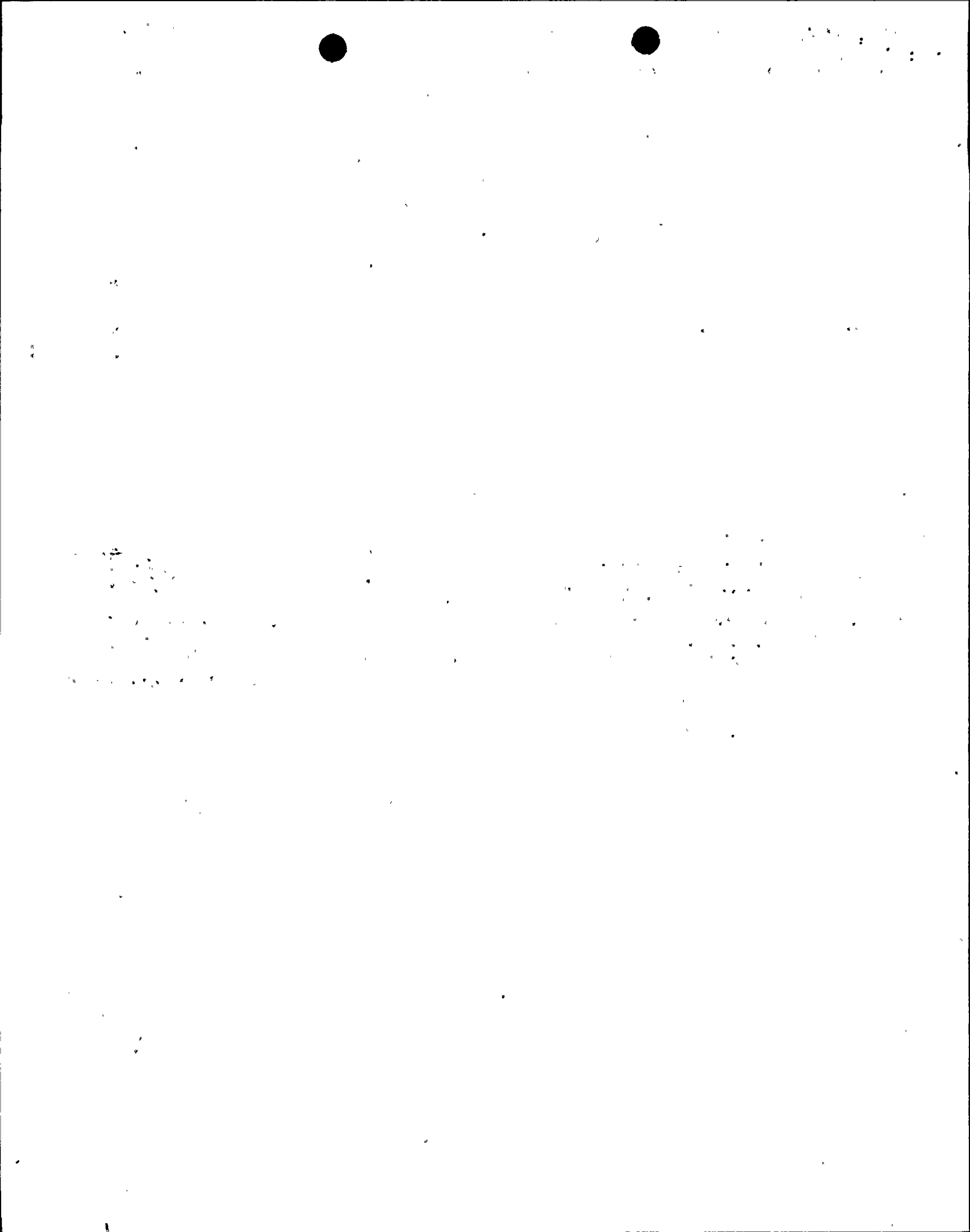


TABLE 14.2-43 (Cont)

5. The test will ensure that the effluent dryers and associated instrumentation operate according to design.
6. System control instrumentation, alarms, interlocks, and annunciators will be demonstrated for correct response.
7. A loss-of-air-supply test (Regulatory Guide 1.68.3) will be conducted on all portions of the instrument air system which interface with safety-related systems to verify that the air-controlled components supplied directly from the instrument air system will respond as designed. A listing of all air and nitrogen operated safety related valves is in Table 14.2-43A.
8. The test procedure will verify there are no crossties between the service air and instrument air systems which will degrade system operation.
9. The test will demonstrate that the ADS safety relief valves will remain functional after a loss of nitrogen supply.

Acceptance Criteria

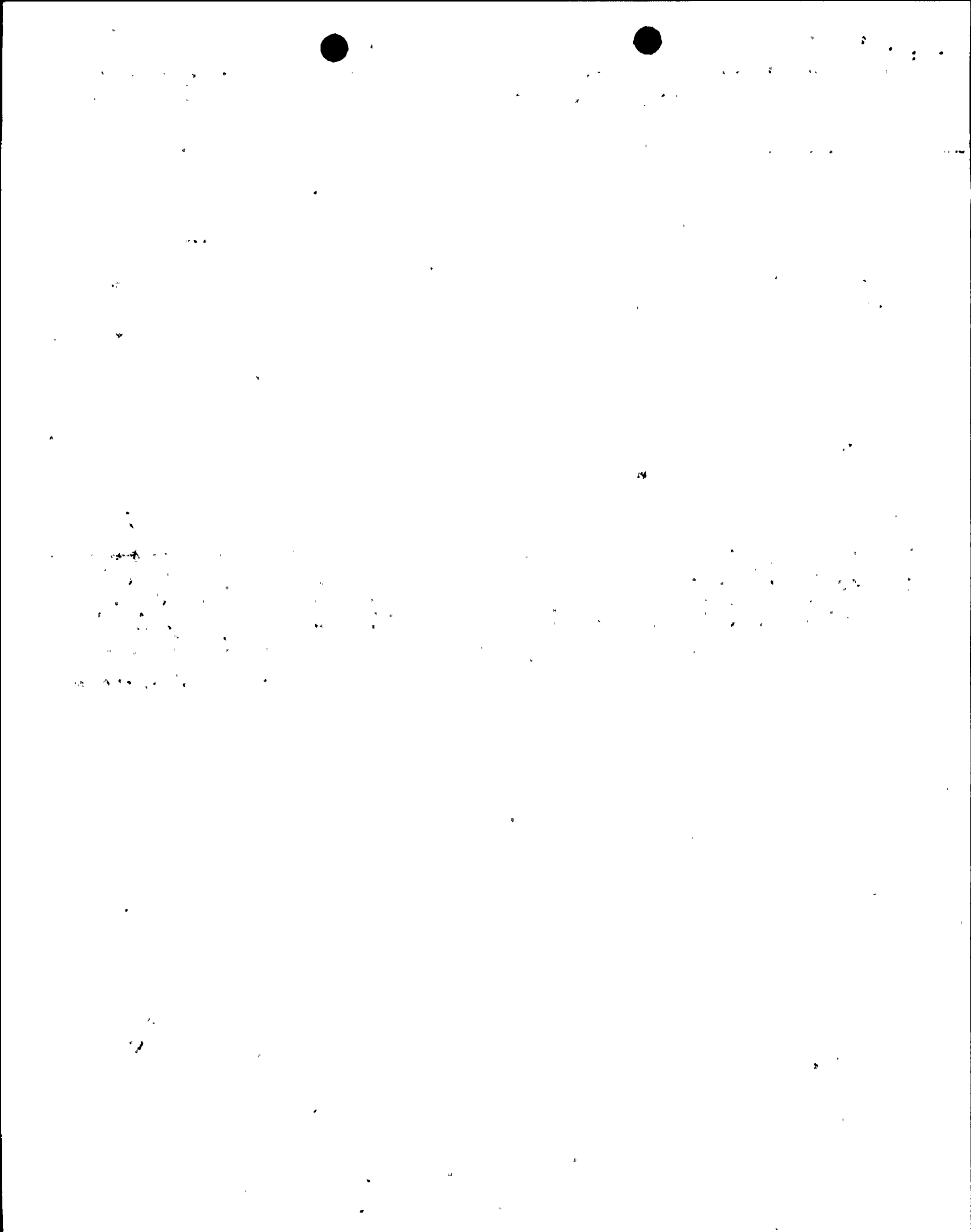
1. The air compressors operate according to design specifications outlined in Equipment Specification No. NMP2-P261C.
2. The trip and autostart modes for the air compressors function as outlined in applicable SWEC logic diagrams.
3. System control instrumentation, alarms, annunciators, and interlocks will operate according to design as illustrated in applicable SWEC logic diagrams.
4. The system meets its design functions as described in Section 9.3.1.
5. The air and nitrogen operated safety related valves listed in Table 14.2-43A fail in their fail-safe positions on a loss of air/nitrogen.
6. The accumulators for the ADS relief valves maintain sufficient pressure after the loss of nitrogen supply to permit at least one relief cycle.



LOSS OF AIR TEST

TABLE 14.2-43A  
(AIR OPERATED)

VALVE #	ESK/GE	GE#	FAILS	LOCATION	FSK
2SWPAOV20A,B	ESK-7SWP03	NA	F.O.	AB	9-10B,F
*A0V22A,B	-7SWP03	↓	↓	AB	9-10B,F
*A0V97A,B	-7SWP10	↓	↓	RB	9-10D,K
*A0V571	-7SWP16	↓	↓	ASB	9-10J
*A0V572	-7SWP05	↓	↓	ASB	9-10E
*A0V573	-7SWP05	↓	↓	CC	9-10M
*A0V574	-7SWP16	↓	↓	CC	9-10M
*A0V581	-7SWP18	↓	↓	CC	9-10M
*A0V154A,B	-7SWP05	↓	↓	CC	9-10M
*A0V78A,B	-7SWP20	↓	↓	CC	9-10AJ
ZHVR*A0D1A,B	ESK-7HVR06	NA	F.C.	RB	22-1A
*A0D6A,B	-7HVR01,02	↓	F.O.	↓	22-1M
*A0D9A,B	-7HVR06	↓	F.C.	↓	22-1M
*A0D10A,B	-7HVR06	↓	F.C.	↓	22-1M
*A0D34A,B	-7HVR01	↓	F.C.	↓	22-1M
*A0D204	-7HVR08	↓	F.C.	↓	22-1M
ZHVP*A0D4A,B,C,D	ESK-7HVPO1,02	NA	F.O.	DB	22-7
ZHVP*A0D5A,B	ESK-7HVPO3	NA	F.O.	DB	22-7
ZHVY*A0D34A,B	ESK-7HVOB	NA	F.O.	SW	22-8B
ZHVC*A0D61A,B	ESK-7HVC01,02	NA	F.O.	CB,CC	22-9A,J
*A0D117	-7HVC08	↓	F.C.	CB	22-9B
*A0D120	-7HVC08	↓	↓	CB	22-9B
*A0D6A,B	-7HVC01,02	↓	↓	CC,CB	22-9C
*A0D12A,B	-7HVC01,02	↓	↓	CB	22-9B
*A0D145	-7HVC08	↓	↓	CB	22-9B
*A0D142	-7HVC08	↓	↓	CB	22-9B
*A0D148	-7HVC08	↓	↓	CC	22-9C
*A0D54A,B	-7HVC03	↓	F.O.	CB	22-9D
*A0D182	-7HVC19	↓	F.C.	ASB	22-9E
*A0D183	-7HVC05	↓	F.O.	ASB	22-9E



# LOSS OF AIR TEST

TABLE 14.2-43A  
(AIR OPERATED)

VALVE #	ESK/GE	GE#	FAILS	LOCATION	FSK
ZHVC *AOD192 ↓ *AOD193 *AOD169 *AOD170 *AOD171 *AOD177 *AOD178 *AOD179 *AOD212 *AOD213 *AOD214 *AOD215	ESK-7HVC20 ↓ -7HVC05 -7HVC19 -7HVC05 -7HVC19 -7HVC20 -7HVC05 -7HVC20 -7HVC19 -7HVC20 -NA -7HVC20	NA ↓	F.C. F.O. F.O. F.O. F.C. F.C. F.C. F.O. F.O. F.O. F.O.	ASB ASB CB ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	22-9E 22-9E 22-9F ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
2RCS *CTV102 (RECIRC)	ESK-7RCS (LATER)	B35-F020	F.C.	RB	25-1A
2CPS *AOV104 ↓ *AOV105 *AOV110 *AOV111 (RDRBE)	ESK-7CPS01 ↓ -7CPS01 -7CPS02 -7CPS02	NA ↓	F.C. ↓ ↓ ↓	RB ↓ ↓ ↓	22-23 ↓ ↓ ↓
2ICS *AOV109 ↓ *AOV110 *AOV130 *AOV131 (RECIC)	807E, 73TY (16) ↓	ES1-F004 ES1-F005 ES1-F025 ES1-F026	F.C. ↓ ↓ ↓	RB RB RB SC	27-6C 27-6C 27-6D 27-6D
2CTS *AOV101 (STRIPPY GAS TREATMENT)	ESK - (LATER)		F.C.		27-15A
2SFC *AOV19A,B ↓ *AOV33A,B *AOV153 *AOV154 (FUEL POOL COOL.)	ESK-7SFC01,02 ↓ -7SFC01,02 -7SFC09 -7SFC010	NA ↓	F.C. ↓ ↓ ↓	RB ↓ ↓ ↓	34-2D 34-2A,B 34-2C 34-2C
2RDS *AOV123 (CONTROL ROD DRIVE)	807E159TY (2)	C12-FC11	F.O.	RB	36-1F

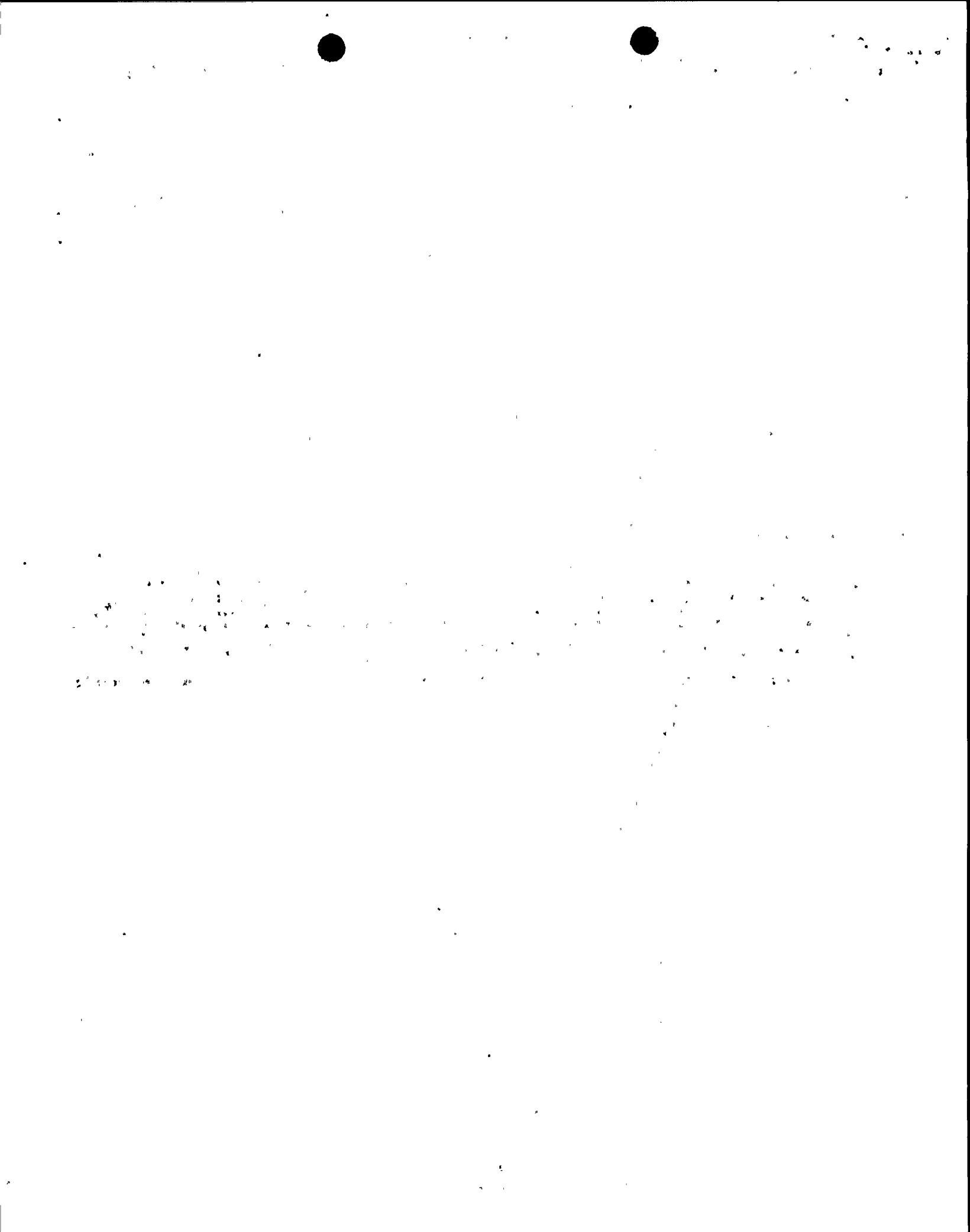


1945

LOSS OF AIR TEST

TABLE 14.2-43A  
(NITROGEN OPERATED)

VALVE #	ESK/GE	GE#	FAILS	LOCATION	FSK
2CPS*ADV106 ↓ *ADV107 ↓ *ADV108 ↓ *ADV109	ESK-7CPS01 ↓ -7CPS01 ↓ -7CPS03 ↓ -7CPS03	NA ↓	F.C. ↓		FSK-12-1M, 22-23 ↓
2RCS*ADV45A ↓ *ADV45B	ESK-5RCS01,03 ESK-5RCS02,04	B35-F079A B35-F079B	F.O. F.O.		FSK-12-1M, 25-1B FSK-12-1M, 25-1B
2RCS*CTV101	ESK-7RCS-(LATER)	B35-F019	F.C.		FSK-12-1M, 25-1A





Nine Mile Point Unit 2 FSAR

TABLE 14.2-110

REACTOR BUILDING - POLAR CRANE

System 84

Preoperational Test (N2-POT-84A)

Test Objectives

1. To demonstrate the reliable operation of the reactor building - polar crane and components.
2. To ensure the system is properly designed and constructed.

Safety Precaution

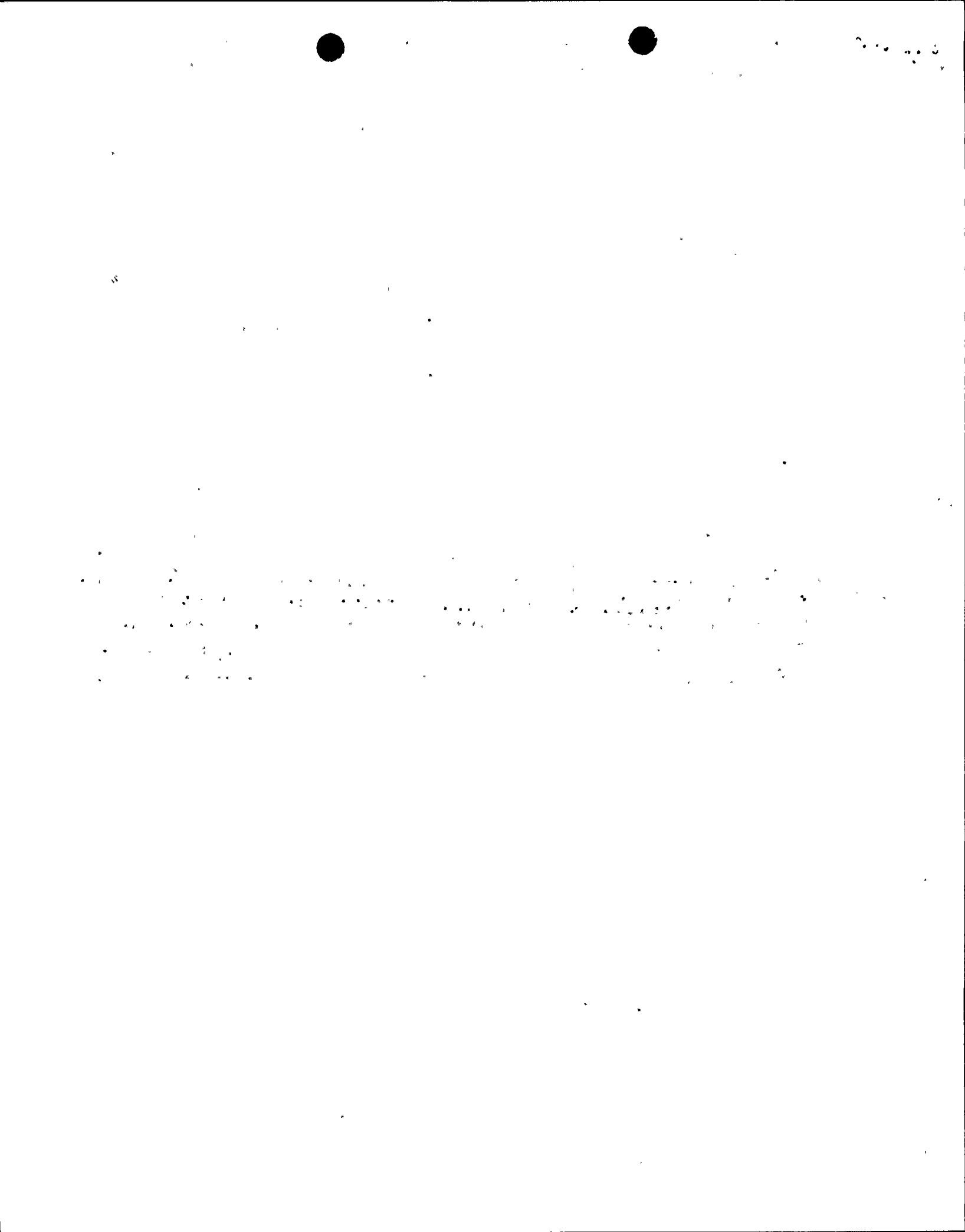
Follow all NMPC safety rules and proper procedures during testing.

Prerequisites

1. All applicable preliminary tests are completed and approved.
2. All applicable motor control centers to supply electric power to motors, control circuits, and instrumentation are available.
3. Manual main line supply breaker and manual disconnect switch operates satisfactorily.

Test Procedure

1. All pendant and radio controls are verified for proper operation.
2. The operation of all locking and safety devices is verified.
3. The restrictive path operation with both pendant and radio controls is verified.
4. Dynamic and static load tests, at 100 percent and 125 percent of rated load, will be performed to verify the crane's ability to function as designed.
5. Nondestructive and functional testing of the special lifting devices for Reactor Vessel Internals will be performed.



Nine Mile Point Unit 2 FSAR

TABLE 14.2-110 (Cont)

Acceptance Criteria

1. All limit switches, interlocks, and locking and safety devices function as designed.
2. The polar crane responds correctly to all pendant and remote control functions.
3. The polar crane functions as described in Section 9.1.4.2.
4. The testing of the special lifting devices has been satisfactorily completed per ANSI N14.6 - 1978.

