# RETURN TO REACTOR DOCKET FILES

ATTACHMENT A

Re: Turkey Point Unit 4
Docket No. 50-251
Revised Pump and Valve Test Program

TECHNICAL SPECIFICATION CHANGES

RETURN TO REACTOR DOCKET FILES

Docket # 50-25 Control # 482350360 Date \_\_\_\_\_of Document REGULATORY DOCKET FILE W/Irdd 8-23-78 Applicability:

Applies to testing of the Safety Injection System.

Objective:

To verify that the subject systems will respond promptly and perform their design functions.

## Specifications: 1.

#### 1. SYSTEM TESTS

a. System tests shall be performed at each refueling shutdown. The test shall be performed in accordance with the following procedure:

With the Reactor Coolant System pressure equal to or less than 350 psig and temperature equal to or less than 350F, a test safety injection signal will be applied to initiate operation of the system. The breakers for the residual heat removal pump motors will be tested either in the test position or by actual residual heat removal pump motor operation resulting from the test safety injection signal.

b. The test will be considered satisfactory if control panel indication and visual observations
indicate that all components have received the
safety injection signal in the proper sequence
and timing, appropriate breakers shall open and
close, and all automatic valves shall complete
their travel.

## 2. COMPONENT TESTS

- a. Pumps (Unit 3 only)
  - The residual hear removal pumps shall be started at intervals not greater than one month.

<sup>(</sup>Unit 4 only) Compliance with Specification 4.2.2(Unit 4 only) demonstrates operability.

2. Pumps shall start and reach required head for normal or recirculation flow, whichever is applicable to the operating condition; the instruments and visual observations shall indicate proper functioning. Test operation shall be for a least 15 minutes.

## b. Valves (Unit 3 only) $\phi$

- The boron injection tank isolation valves receiving a Safety Injection signal shall be cycled monthly.
- 2. The containment recirculation sump suction valves shall be cycled nonthly.
- 3. Accumulator check valves shall be checked for operability during each refueling sout-
- 4. The refueling water storage tank outlet valves shall be tasted in performing the respective pump tests.†
- † N.A. during cold or refueling shutdowns. The specified tests, however, shall be performed within one surveillance interval prior to reactor startup.
- The N.A. during cold or refueling shurdowns. The specified tests, however, shall be performed within one surveillance interval prior to heatup above 200 F.
  - Ø (Unit 4 only) Compliance with Specification 4.2.2(Unit 4 only)
    demonstrates operability of all safety injection pumps, all Unit 4
    residual heat removal pumps, and Unit 4 valves.

#### 2. COMPONENT TESTS

# Pumps and Fans

The centralment spray pumps (Unit 3 only)  $\phi$  and the Emergency Containment Cooling fans shall be started at intervals not greater than one (1) month. ††

Acceptable levels of performance small be that the pumps reach their raced shut off heads, the fan motors reach their nominal operating current for the containment atmosphere during the test, and both operate for at least fifteen minutes.

Valves (Unit 3 only) o

The systems motor operated isolation valves will be tested for operation during system tests.

- TT N.A. during cold or refueling shurdowns. The specified tests, however, shall be performed within one surveillance interval prior to hearup above 200 F.
- $\phi$  (Unit 4 only) Compliance with Specification 4.2.2 (Unit 4 only) demonstrates operability.

## 3 LABORATORY TESTS

Quarterly, a charcoal surveillance specimen which had been located in a representative part of the containment will be withdrawn and laboratory tested for iodine removal capability. The charcoal shall: demonstrate a removal efficiency of 99.9% for elemental iodine. Failing this, the charcoal within the containment filter system shall be replaced by charcoal which meets or exceeds original specifications.

## 4.7.2 POST-ACCIDENT CONTAINMENT VENT SYSTEM

## 1 OPERATING TESTS.

A system test shall be performed during each scheduled refualing period, which shall consist of visual inspection and (for Unit 3) operation of all valves. Visual inspection shall include search for any foreign material, gacket deterioration in HEPA filters, and excessive dust cake on demister.

## 2. PERFORMANCE TESTS

During each refueling operation, "in-place" DOP and freon tests shall be conducted at design flow on the filters. 99.5% DOP and 99.0% freon removal shall constitute acceptable performance. The hydrogen concentration measuring instrument shall be calibrated with proper consideration to humidity during each refueling period.

 <sup>6 - (</sup>Unit 4 only) Compliance with Specification 4.2.2 (Unit 4 only)
 demonstrates operability.

## ATTACHMENT B

Re: Turkey Point Unit 4
Docket No. 50-251
Revised Pump and Valve Test Program

REVISED PUMP TEST PROGRAM

&

REVISED VALVE TEST PROGRAM

#### ATTACHMENT B

Turkey Point Unit 4

- (1) Valve Test Program
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- (3) Inservice Inspection Program

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## ABSTRACT

The planned inservice inspection and testing programs were developed employing the R. G. 1.26, Revision 2, criteria for quality group classifications and standards (Quality Group A is the same as ASME Class 1, etc.).

## Section F. Valve Test Program Outline

The valve test program shall be conducted in accordance with Subsection IWV of Section XI of the 1974 Edition of the ASME Boiler and Pressure Vessel Code thru Summer 1975 Addenda, except for specific relief requested in accordance with 10 CFR 50.55a(g)(5)(iii) which is identified in Sub-sections I.G. The period for this valve test program starts September 7, 1978 and ends May 7, 1980.

# Section II. Pump Test Program Outline

The pump test program shall be conducted in accordance with Subsection IWP of Section XI of the 1974 Edition of the ASME Boiler and Pressure Vessel Code thru Summer 1975 Addenda. The period for the pump test program starts September 7, 1978 and ends May 7, 1980.

## Section III. Inservice Inspection Program Outline

The inservice inspection program shall be conducted in accordance

## Section III. (Continued)

with Subsection IWB, IWC and IWD of Section XI of the 1974
Edition of the ASME Boiler and Pressure Vessel Code thru
Summer 1975 Addenda, except for specific relief requested
in accordance with 10 CFR 50.55a(g)(5)(iii) which is identified
in the appropriate code class of the ISI Table under Remarks
in Subsection III. The period for the inservice inspection
(ISI) program starts January 7, 1977 and ends May 7, 1980.

# I.A. LIST OF DRAWINGS

	•	i			
. PPL	NO.	F-503184,	REV.	7	CHEMICAL & VOLUME CONTROL SYSTEM
FPL	NO.	E-503185,	REV.	7 .	SAFETY INJECTION SYSTEM
FPL	йо.	F-503187,	REV.	7	AUXILIARY COOLANT SYSTEM COMPONENT COOLING
FPL	NO.	E-503188,	REV.	7	AUXILIARY COOLANT SYSTEM COMPONENT COOLING
FPL	NO.	F-503189,	REV.	8	WASTE DISPOSAL SYSTEM
FPL	NO.	F-503191,	REV.	6	REACTOR COOLANT SYSTEM
. FPL	NO.	F-503193,	REV.	7	SAMPLING SYSTEM
FPL	ио.	F-503194',	REV.	б	AUXILIARY COOLANT SYSTEM RESIDUAL HEAT REMOVAL
~FPL	NO.	F-503195,	REV.	4	AUXILIARY COOLANT SYSTEM SPENT FUEL PIT COOLING SYSTEM
FPL	ио.	F-502027,	REV.	14	STEAM SYSTEM
FPL	NO.	F-502028,	REV.	15	CONDENSATE AND FEEDWATER SYSTEMS
FPL	NO.	F-502030,	REV.	14	LUBE OIL SERVICE AND INSTRUMENT AIR
·FPL	NO.	F-502031,	REV.	14	CIRCULATING WATER SALT WATER AND CHLORINATION SYSTEMS
FPL	NO.	F-502033,	REV.	8	DIESEL OIL
, FP <u>L</u>	NO.	F-502036,	<u> </u>	14	PRIMARY MAKE-UP CONTAINMENT COOLING WATER AND CHEMICAL INJECTION SYSTEMS
T?L	NO.	₹-502037,	REV.	10	SARIEM CONTYINENT AENTITYLION .
FPL	NO.	F-502038,	REV.	10	CONTAINMENT AND RADWASTE

DRAINS AND VENTS

#### I.B. LIST OF VALVE CATEGORIES

- CATEGORY A Valves for which seat leakage is limited to a specific maximum amount in the closed position for fulfillment of their function.
- CATEGORY B Valves for which seat leakage in the closed position is inconsequential for fulfillment of their function.
- CATEGORY C Valves which are self-actuating in response to some system characteristic, such as pressure (relief valves) or flow direction (check valves).
- CATEGORY D Valves which are actuated by an energy source capable of only one operation, such as rupture disks or explosive actuated valves.
- CATEGORY E Valves which are normally locked (or sealed) open or locked (or sealed) closed to fulfill their function.

#### FOOTNOTE:

Combination of categories, such as categories AC are to be used when more than one distinguishing category characteristic is applicable. In such cases, all requirements of each of the individual categories are applicable, although duplication or repetition of common testing requirements is not necessary.

#### I. C. LIST OF DEFINITIONS:

- 1) ACTIVE VALVES are required to change position either by opening, closing, or opening and reclosing to either safely shut down the reactor or mitigate the consequences of an accident.
- 2) PASSIVE VALVES are not required to change position to either safely shut down the reactor or mitigate the consequences of an accident.
- 3) <u>EXERCISING</u> Exercising is the demonstration, based on direct or indirect visual or other positive indication, that the valve exhibits the required change of disk position to fulfill its function.
  - a) FULL STROKE is the valve stem or disc movement to the position required (to open or to close) to fulfill its function.
  - b) <u>Normally open valve</u> verification of seating upon cessation or reversal of flow.
  - c) Normally closed valve verification of opening upon cessation of pressure differential or initiation of flow or by mechanical force.

## I. D. LIST CF VALVE TABLE SYMBOLS

VALVE NUMBER:

IDENTIFICATION

SIZE:

INCHES

TYPE:

GATE - GLOBE - CHECK - ANGLE - 3-WAY - PLUG

SAFE - SAFETY AND RELIEF

REL

NOZL - NOZZIE

NEDL - NEEDLE

BUTFY - BUTTERFLY

DIAPH - DIAPHRAGM

ACTUATOR:

AO - AIR OPERATOR

MO - ELECTRIC MOTOR OPERATOR

SO - SOLENOID OPERATOR

SA OR

SELF - SELF ACTUATOR

CODE CLASS:

1 - 2 - 3

CCDE CATEGORY:

A - B - C - E (OR COMBINATION OF) - SEE

TABLE A BELOW and SUB-SECTION I. B.

ACTIVE/PASSIVE:

A - P - (SEE TABLE A BELCW)

NORMAL POSITION:

NO - NORMALLY OPEN

NC - NORMALLY CLOSED

LO - LOCKED OPEN

IC - LOCKED CLOSED

FAILURE MCDE:

FO - FAIL OPEN

FC - FAIL CLOSED

FAIL - FAIL AS IS

REMOTE POSITION

INDICATION:

YES - NO

TEST PERIOD:

1. REFUELING SHUTDOWN

2. COLD SHUTDOWN - SEE NOTE(S) 1 FOR

DEFINITION UNDER SUB-SECTION I. E. & I. G.

3. OPERATION - 3 MONTHS OR LESS (CCDE)

INSERVICE INSPECTION:

(ISI) TESTS

SEE APPROPRIATE LIST OF CATEGORY LEGEND

( SUB-SECTION I.E. & I. G. )

ASTERISK (\*) - CNE (1) IMSPECTION

INTERVAL ( TEN YEARS )

# I. D. LIST OF VALVE TABLE SYMBOLS (CCNT'D)

RRB NO.

NUMBER RELATES TO APPROPRIATE VALVE

RELIEF REQUEST BASIS

VALVE COORDINATE

LOCATION OF VALVE ON DRAWING

REMARKS

RELATES TO SPECIAL ALTERNATE TESTING

#### TABLE - A

CATEGORY	VALVE FUNCTION	CODE LEAK TEST	CODE EXER. TEST	CODE POSIT. VERIF.
A	ACTIVE	IWV-3420	IWV-3410	NONE
A	PASSIVE	IWV-3420	NONE	NONE
B	ACTIVE	NONE	IWV-3410	NONE
C (S/R)	ACTIVE	NONE	IWV-3510	NONE
C (CHK)	ACTIVE	NCNE	IWV-3520	NONE
E	PASSIVE	NONE	NONE	IW-3700

I.E. LIST OF CATEGORY (A-B-C-E): LEGEND FOR TABLE I - TEST PARAMETERS TO (CODE), EXCEPT AS OTHERWISE NOTED (FPL).

#### - CATEGORY A-B VALVES -

- EF-1 Exercise valve (full stroke) for operability every 3 months (Code).
- EF-2 Exercise valve (full stroke) for operability during cold shutdown (Code).
- EF-3 Exercise valve (full stroke) for operability during operation (Code).
- EF-4 Exercise valve (full stroke) for operability prior to return to service (Code).
- EF-5 Exercise valve (with Remote Position Indicator and inaccessible for direct observation) for verification of valve position during refueling but less than every 2 years (Code).
- EF-7 Exercise valve (with Fail-Safe Actuators) to observe failure mode every 3 months (Code).
- EF-8 Exercise valve (with Fail-Safe Actuators) to observe failure mode during cold shutdown (Code).
- EST-1 Exercise valve power operated (full stroke) and measure time (Code) (5 seconds Max.) (FPL).
- EST-2 Exercise valve power operated (full stroke) and measure time (Code) (10 seconds Max.) (FPL).
- EST-3 Exercise valve power operated (full stroke) and measure time (Code) (60 seconds Max.) (FPL).
- EST-4 Exercise valve power operated (full stroke) and measure time (Code) (120 seconds Max.) (FPL).
- EST-5 Exercise valve power operated (full stroke) and measure time (Code) (180 seconds Max.) (FPL).
- EST-6 Exercise valve power operated (full stroke) and measure time (Code) (15 seconds Max.) (FPL).
- SLT-1 Seat leakage test valve during refueling but less than every 2 years (Code).
- SLT-3 Seat leakage test valve to plant procedure (FPL).

## I. E. LIST OF CATEGORY (A-B-C-E): LEGEND FOR TABLE I (CCNT'D)

#### - CATEGORY "C" VALVES -

- EF-1 Exercise valve (full stroke) for operability every 3 months (Code).
- EF-2 Exercise valve (full stroke) for operability during cold shutdown (Code).
- EF-3 Exercise valve (full stroke) for operability every 9 months (Code).
- TF-1 Safety and relief valve tests (Set Point) to ASME Table TWW-3510-1 (Code).

#### - CATEGORY "E" VALVES -

CC-l Crerational check of valve (verification of position) before and after operation (Code).

#### NOTES:

- 1) Cold Shutdown - ISI tests scheduled for Test Period 2. (Cold Shutdown) shall commence no later than 48 hours after reaching Cold Shutdown conditions, or no later than 64 hours if Cold Shutdown conditions are reached between Friday 1600 hours and Monday 0800 hours. In the case of frequent Cold Shutdowns, valve testing will not be performed more often than once every three (3) months for Category A and B valves; once every nine (9) months for Category C and AC valves. Valves that are not tested during a specific Cold Shutdown, due to plant startup, will be identified to assure their testing in the event of untimely Cold Shutdowns within the time periods (i.e., 3 months or 9 months, as applicable). However, in the event that Cold Shutdowns extend beyond these time periods, all the valves shall be re-scheduled for testing commencing with those that were not tested during the previous Cold Shutdown period. In any event, plant startup shall not be delayed to complete valve testing.
- 2) Corrective Action Where a valve fails to meet the requirements of this program and/or the reference Code, the condition(s) shall be reviewed by the Plant Nuclear Safety Committee for disposition and determination of

## I. E. LIST OF CATEGORY (A-B-C-E): LEGEND FOR TABLE I (CCNT'D)

whether it involves an unreviewed safety question prior to commencing with plant startup or continuing with plant operation.

3) Test Period - Column: Where test frequency is denoted as 1 or 2, tests may be performed during either period dependent upon plant conditions.

I.F. LIST OF CATEGORY A: TABLE I.A. - SEAT LEAKAGE TEST PARAMETERS TO FPL REQUIREMENTS.

SEAT LEAKAGE RATES BASED ON AIR TESTS

50 PSI AP at Pa

WHERE:

Pa = ACCIDENT PRESSURE

I. G. LIST CF CATEGORY (A-B-C): LEGEND FOR TABLE II EXCEPTIONS TO CODE REQUIREMENTS DETERMINED TO BE
IMPRACTICAL...PARAGRAPH 50.55a(g) (5) (iii).

LEGAND - The LEGAND in Sub-Section I. E. applies to this Table.

#### NOTES:

- 1) Notes 1, 2 and 3 of Sub-Section I. E. apply to this Table.
- 2) Each valve in Table II is either
  - a) Partially tested to code or,
  - b) Taken exception to, but supported by Relief Request Basis including Alternate Tests.

## I.H. LIST OF EXCLUSIONS: TABLE III - EXEMPTIONS TO CODE (IWV-1300)

- ' Vent Valves
- · Drain Valves
- Instrument Valves
- · Test Valves
- ' Maintenance Valves
- ' Non-Nuclear Safety Valves

This table of valves is not included in this report. They are identified and included in the plant records.

RELIEF REQUEST BASIS - ATTACHMENT B-1 CODE REQUIREMENTS DETERMINED TO BE IMPRACTICAL.... PARA. 50.55 a (g) 5 (iii), RELIEF REQUEST BASIS SUPPORTED BY ALTERNATE TESTING.

CHEMICAL & VOLUME CONTROL SYSTEM	PG.	l TO	8
SAFETY INJECTION SYSTEM	PG.	1 TO	10
AUXILIARY COOLANT SYSTEM COMPONENT COOLING	PG.	1 TO	,3 <u>,</u>
REACTOR COOLANT SYSTEM	PG.	l TO	1
SAMPLING SYSTEM	PG.	1 TO	1
AUXILIARY COOLANT SYSTEM RESIDUAL HEAT REMOVAL	PG.	1 TO	2
STEAM SYSTEM .	PG.	1 10	1
CONDENSATE AND FEEDWATER SYSTEMS	PG.	1 TO	2
LUBE OIL SERVICE AND INSTRUMENT AIR	PG.	1 TO	3
PRIMARY MAKE-UP CONTAINMENT COOLING WATER AND CHEMICAL INJECTION SYSTEMS	PG.	1 TO	1
CONTAINMENT VENTILATION SYSTEM	PG.	1 TO	2

#### II. PUMP TEST PROGRAM

## II.A. Table IV - Test Parameters

This subsection outlines the pumps which are provided with an emergency power source.

## II.B. Exceptions

Pumps whose access may be restricted due to a high radiation area coupled with its physical location and arrangement in the system. No tests shall be conducted on pumps where this radiation level is 1000 MR/HR or greater.

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	VALVE SIZE TYPE ACTU. CODE CODE ACT/ NORM. FAIL- REM. TEST ISI RRB VALVE REMARKS														
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE CL.			NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	isi Tests	RIB NO.	COOLD	REMARKS	
CV-4-200A	2	PLUG	A/0	1	٨	٨	NC	FC	YES	2 2 2 1	EF-2 EF-8 EST-2 SLT-1	] ]	D-19		
CV-4-200B	2	PLUG	A/0 	1	Λ	Λ	NC	FC	YES	2 2 2 1	EF-2 EF-8 EST-2 SLT-1	1	D-18		
CV-4-200C	.2	PLUG	A/0	1	Α	Λ	Ю	FC	YES	2 2 2 1	EF-2 EF-8 EST-2 SLT-1	1	D-18	,	
CV-4-204	2	PLUG	Λ/0	2	Λ	Λ	Ю	FC	YES	2 2 2 1	EF-2 EF-8 EST-2 SLT-1	2	D-17		
MOV-4-381	3	GATE	МО	2	Λ	Α	NO ·	FĀI	YES	2 2 1	EF-2 EST-3 SLT-1	3	B-16		
4-297A	1	NEDL	MAN	2	۸	Α	NO	FAI	NO	2 1	EF-2 SLT-1	4	Λ-20		

TITLE SYSTEM TITLE

CHEM. VOL. CONT. (CVCS)

F-503184

11146

VALVE TEST PROGRAM

TABLE I TESTS TO CODE

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		······································		·····	FL	ORIDA	POWER 8	s, L.IGHT	COMP AN	Υ			1	e 2 or 43
VALVE NUMBER	SIZE	ТҮРЕ	ACTU.	CODE	CODE		NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RIU3 NO.	COORD	REMARKS
4-297B	1	NEDL	MAN	2	Λ	۸	МО	FAI	ИО	2	EF-2 SLT-1	4	Λ-19	
4-297C	ו	NEDL	MAN	2	Α	Λ	ИО	FAI	ИО	2 1	EF-2 SLT-1	4	A-18	•
IICV-4-121	3	PLUG	۸/0	2	Λ	Λ	NO	FO	NO	2 2 1	EF-2 EF-8 SLT-1	5	C-17	
4-333	3	GLOBE	MAN	2	٨	þ	NC	FAI	ИО	1	SLT-1		C-17	•
CV-4-310A	3	PLUG '	Á/0	1	В	Λ	NO	FO	YES	2 2 2	EF-2 EF-8 EST-3	6	C-19	
CV-4-310B	3	PLUG	A/0 ,	1	В	Λ	NC	FO	YES	2 2 2	EF-2 EF-8 EST-3	6	C-19	
LCV-4-115C	4	GATE	МО	2	В	Λ	ИО	FAI	YES	2 2	EF-2 EST-3	7 -	C-14	
					DOGRAM									

SYSTEM

CHEM. VOL. CONT. (CVCS)

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THE VALVE TEST PROGRAM

TABLE 1
TESTS TO CODE

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NUMBER  SIZE TYPE ACTU. CL. CAT. PAS POS. NORN. PASL POS. POS. NORN. PASL POS. POS. POS. POS. POS. POS. POS. POS.		<del>-1</del> i	<del></del>	<u> </u>					LIGHT (			·····	<del>                                     </del>	<del>                                     </del>		
LCV-4-115B	VALVE NUMBER	SIZE	TYPE ·	ACTU.					URE		TEST PER.	TSI TESTS	RRB NO.	COOLED	RIMARKS	
397D 2 CHECK SA 3 C A NC NO 3 EF-1 A-7  MOV-4-350 2 GATE. MO 2 B A NC FAI YES 2 EF-2 9 A-12  4-312A 3 CHECK SA 1 C A NC NO 2 EF-2 10 C-19  4-312B 3 CHECK SA 1 C A NC NO 2 EF-2 10 C-19  4-351 2 CHECK SA 2 C A NC NO 2 EF-2 11 A-12  4-357 4 CHECK SA 2 C A NC NO 2 EF-2 12 A-13	LCV-4-115B	4	BUTFY	A/0	2	В	٨		FC	YES	2 2 2	EF-8	8	A-14		
397D 2 CHECK SA 3 C A NC NO 3 EF-1 A-7  MOV-4-350 2 GATE. MO 2 B A NC FAI YES 2 EF-2 9 A-12  4-312A 3 CHECK SA 1 C A NC NO 2 EF-2 10 C-19  4-312B 3 CHECK SA 1 C A NC NO 2 EF-2 10 C-19  4-351 2 CHECK SA 2 C A NC NO 2 EF-2 11 A-12  4-357 4 CHECK SA 2 C A NC NO 2 EF-2 12 A-13	397C	2	CHECK	SA.	3	С	۸	√NC		ио	3	EF-1		Λ-7		
4-312A 3 CHECK SA 1 C A NC NO 2 EF-2 10 C-19 4-312B 3 CHECK SA 1 C A NC NO 2 EF-2 10 C-19 4-351 2 CHECK SA 2 C A NC NO 2 EF-2 11 A-12 4-357 4 CHECK SA 2 C A NC NO 2 EF-2 12 A-13	397D	2	CHECK		3	С	۸	NC		ио	3	EF-1		Λ-7		
4-312B 3 CHECK SA 1 C A NC NO 2 EF-2 10 C-19 4-351 2 CHECK SA 2 C A NC NO 2 EF-2 11 A-12 4-357 4 CHECK SA 2 C A NC NO 2 EF-2 12 A-13	MOV-4-350	2	GATE."	МО	2	В	Α	NC .	FAI	YES	2 2		9	Λ-12		
4-357 2 CHECK SA 2 C A NC NO 2 EF-2 11 A-12 4-357 4 CHECK SA 2 C A NC NO 2 EF-2 12 A-13	4-312A	3	CHECK	SA	1	С	٨	ИС		ИО	2	EF-2	10	C-19		
4-357 4 CHECK SA 2 C A NC NO 2 EF-2 12 A-13	4-312B	3	CHECK	SA	1	С	۸	ИС		ио	2	EF-2	10	C-19		
	4-351	2	CHECK	SA	2	С	۸	NC		ио	2	EF-2	11	Λ-12		
	4-357	4	CHECK	SĂ	2	С	Λ	NC		ИО	2	EF-2	12	A-13		
							,									

TITLE CHEM. VOL. CONT. (CVCS)

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TITLE

VALVE TEST PROGRAM

TABLE I TESTS TO CODE

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	<del>-,</del> 1					ORIDA					T		<del></del>	·· · · · · · · · · · · · · · · · · ·
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE	CODE	NCT/ PAS	NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	INN NO.	COOM	RIMARKS
4-298∧	2	CHECK	SΛ	1	VC	Λ	110		110	1 1	EF-2 SLT-1	13	Λ-20	
4-298B	Ž	CHECK	SA	1	VC	Λ	110		010	1	EF-2 SLT-1	13	Λ-19	
4-298C	2	CHECK	SA	1	VC	٧.	NO		<b>HO</b>	, ] ]	EF-2 SLT-1	13	Λ-18	
4-312C	3	CHECK	SA	1	AC	. Λ	nò .		011	] 1	EF-2 SLT-1	14	C-17	
	¥	,					  -  -							
			·:											
							,							

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EXCEPTIONS TO CODE

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VALVE NUMBER   SIZE   TYPE   ACTU   CODE   CAT   PAS   POS   POS																
MOV-4-860B         14         GATE         MO         2         B         A         NC         FAI         YES         2         EF-2 EST-4         1         A-9           MOV-4-861A         .14         GATE         MO         2         A         A         NC         FAI         YES         2         EF-2 EST-4 SLT-1         2         A-8           MOV-4-861B         14         GATE         MO         2         A         A         NC         FAI         YES         2         EF-2 EST-4 SLT-1         2         A-8           MOV-4-880A         6         GATE         MO         2         A         A         NC         FAI         YES         3         EF-1 EST-6 SLT-1		SIZE	TYPE	ACTU.					URE	POS.					RUMARKS	
MOV-4-860B         14         GATE         MO         2         B         A         NC         FAI         YES         2         EF-2 EST-4         1         A-9           MOV-4-861A         . 14         GATE         MO         2         A         A         NC         FAI         YES         2         EF-2 EST-4 SLT-1         2         A-8           MOV-4-861B         14         GATE         MO         2         A         A         NC         FAI         YES         2         EF-2 EST-4 SLT-1         2         A-8           MOV-4-880A         6         GATE         MO         2         A         A         NC         FAI         YES         3         EF-1 EST-6 SLT-1	MOV-4-860A	14	GATE <sub>.</sub>	MO	2	В	A	NC	FAI	YES	2 2		1	A-9		
MOV-4-861A         . 14         GATE         MO         2         A         A         NC         FAI         YES         2         EF-2 EST-4 SLT-1         2         A-8           MOV-4-861B         14         GATE         MO         2         A         A         NC         FAI         YES         2         EF-2 EST-4 SLT-1         2         A-8           MOV-4-880A         6         GATE         MO         2         A         A         NIC         FAI         YES         3         EF-1 EST-6 SLT-1          B-7           MOV-4-880B         6         GATE         MO         2         A         A         NIC         FAI         YES         3         EF-1 EST-6 SLT-1          B-7           MOV-4-863A         8         GATE         MO         2         B/E         A         IC         FAI         YES         2         EF-2 EST-3         3         B-8	MOV-4-860B	14	GATE	МО	2	В	А	ИС	FAI	YES	2 2		1			
MOV-4-861B       14       GATE       MO       2       A       A       NC       FAI       YES       2       EF-2 EST-4 SLT-1       2       A-8         MOV-4-880A       6       GATE       MO       2       A       A       NC       FAI       YES       3 EF-1 EST-6 SLT-1        B-7         MOV-4-880B       6       GATE       MO       2       A       A       NC       FAI       YES       3 EF-1 EST-6 SLT-1        B-7         MOV-4-863A       8       GATE       MO       2       B/E       A       LC       FAI       YES       2 EF-2 EST-3       3 B-8	ļ	. 14		МО	2	A	А	NC	FAI	YES	2 2 1	EST-4	2	A-8		
MOV-4-880B 6 GATE MO 2 A A NC FAI YES 3 EF-1 B-7  MOV-4-863A 8 GATE MO 2 B/E A LC FAI YES 2 EF-2 3 B-8	MOV-4-861B	14	GATE	,	2	А	А	ИС	FAI	YES	2 2 2	EST-4	2	i		-
MOV-4-863A 8 GATE MO 2 B/E A IC FAI YES 2 EF-2 3 B-8	MOV-4-880A	6	GATE	мо	2	А	А	MC		YES	3	EST-6		B-7		•
110V=4=803A	MOV-4-880B	6	GATE	МО	2	A	A	HC	FAI	YES	3 3 1	EST-6		B-7		
	MOV-4-863A	8	GATE	МО	2	B/E	A .	ıc	FAI	YES	2	EST-3	3	B-8		

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VALVE TEST PROGRAM

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					FL	ORIDA	POWER 8	LIGHT (	COMPAN	Υ	·	·	t	
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE CL.	CODE CAT.	nct/ Pas	NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RRB NO.	VALVE	REMARKS
MOV-4-863B	8	GATE	M0	2	B/E	• А	IC.	FAI	YES	2 2 1	EF-2 EST-2 OC-1	3	B-8	
MOV-4-872	8	GATE	МО	2	В	А	NC	FAI	YES	2 2	EF-2 EST-3	4	A-7	
MOV-4-869	3	GATE	MO	2	В	A	ИС	FAI	YES	3 3	EF-1 EST-3		D-12	
MOV-4-867A	4.	GATE	МО	2	В	A	NC	FAI	YES	3 3	EF-1 EST-6		C-9	
MOV-4-867B	4	GATE	MO	2	В	Α	ИС	FAI	YES	3 3	EF-1 EST-6		C-9	
CV-4-855	ì	GĻOBE	A/0	2	A	A	NC	FC ,	YES	2 2 2 1	EF-2 EF-8 EST-2 SLT-1	5	C-9	
CV-4-841A	1	GLOBE	A/0	2	В	Α	NO	FC	YES	.3 3 3 3	EF-1 EF-7		D-9	
CV-4-841B ·	1	GLOBE	- A/0	2	В	Α	NO .	FC	YES	3 3 3 3	EST-2 EF-1 EF-7 EST-2		D-9	

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					Fl.	ORIDA	POWER	LIGHT (	COMPAN	Υ	·		l	·
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE	CODE CAT.		NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RRB NO.	COOM	REMARKS
4-895V	3/4	GLOBE	, MAN	2	A/E	P	LC	FAI	110	1	SLT-1 0C-1		D-12	
MOV-4-866A	_ 2	GLOBE	МО	1	B/E	٨	LC	FAI	YES	2 2 1	EF-2 EST-3 0C-1	6	D-15	
MOV-4-866B	. 2	GLOBE	мо	1	B/E	Λ	LC	FAI	YES	2 2 1	EF-2 EST-3 0C-1	6	D-15	
MOV-4-843A	4	GATE	M0	2.	В	٨	NC	FAI	YES	3	EF-1		C-13	
MOV-4-843B	4	GATE	. 'M0	٠2	В	٨	ИС	FAI`	YES	3 3 3	EST-6 EF-1 EST-6		C-13	
4-876A	8	CHECK	SA	1	С	٨	ИС		110	2	EF-2	7	B-15	
4-876B.	8	CHECK	SA	] ]	С	٨	ИC		110	2	EF-2	7	Λ-13	·
4-876C	8	CHECK	SΛ	1	С	٨	NC		110	2	EF-2	7	Λ-11	
4-876D	8	СНЕСК	SA.	1	С	Λ	ИС		МО	2	EF-2	8 .	Λ-13	
4-876E	8	CHECK	SA	1	С	٨	ИС		110	2	EF-2	8	Λ-11	

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VALVE TEST PROGRAM

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			•		FL	ORIDA	POWER	8. L.IGIIT	COMP AN	Υ				e 0 O1 45
VALVE NUMBER	SIZE	ТҮРЕ	ACTU.	CODE			NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RRB NO.	VALVE COORD	REMARKS
879A	3	CHECK	.SA	2	С	Λ	NC		001	3	EF-1		D-7	·
879B	3	CHECK	SΛ	2	С	A	NC		110	3	EF-1		C- <u>.</u> 7	• .
879C	3	CHECK	SA	2	С	٨	NC		МО	3	EF-1		C-7	
879D	3	CHECK	SA	2	С	A	NC		NO	3	EF-1		C-7	
4-875A	10	CHECK	SA	1	С	Λ	NC		110	2	EF-2	9	Λ-16	
4-875B	10	CHECK	SΛ	1	С	Λ	NC		110	2	EF-2	9	Λ-17	•
4-875C	10	CHECK	SA	1	С	Λ	NC		ИО	2	EF-2	9	Λ-17	
MOV-4-865A	10	GATE	МО	2	E	P	ĻΟ	FAI	YES	1	0C-1		B-15	
MOV-4-865B	10	GATE	ОМ	2	E	, b	LO	FAI	YES	1	0C-1		B-13	
MOV-4-865C	10	GATE	110	2	E	þ	LO	FAI	YES	1	0C-1	`	B-11	
4-2915	2	GATE	MAN	2	E	P	LO	FAI	110	ì	0C-1		B-10	
SYSTEM				10	HOGHAM			No.				1		

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					Fl.	ORIDA	POWER	k LIGHT	СОМЬ УИ	Y			1	
VALVE NUMBER	SIZE	ТҮРЕ	ACTU.	CODE CL.			NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RRB NO.	COXORD	RIMARKS
4-2916	2	GATE	MAN	2	E	P	LO	FAI	ИО	1	0Ċ-1		B-9	
4-2917	2	GATE	илм	2	E	Р	LO	FAI	110	1	0C-,1		B-9	
4-885	10	GATE	MAN	2	E	P	L0	FAI	ОИ	1	0C-1		Λ-11	
4-887	8	BUTFY	IIAM	2	E	р <i>.</i>	LO	FAI	МО	ו	0C-1		B-6	
4-864-C	8	GATE	MAN	2	E	P	L0	FAI	МО	1	0C-1		C-4	
886-A	6	GATE	MAN	2	E	Р	LO	FΛΙ	011	1	00-1		D-6	
886-B	6	GATE	ИАМ	2	E	P	L0	FAI	110	1	0C-1		C-6	
886-C	6	GATE	илм	2	E	P	LO	FΛΙ	110	1	00-1	<b>`~</b> -	C-6	
886-D	6	GATE	MAN	2	E	Р	LO .	FAI	ИО	1	00-1		C-6	
888- <b>\</b>	3	GATE	MAN	2 -	ĴE	Р	L0	FΛΙ	ио	1	0C-1		D-7	
888-B	3	GATE	MAN.	2	E	р	٢٥	FAI	110	1	0C-1		C-7	

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VALVE NUMBER	SIZE	TYPE	ACTU.	CODE	CODE		NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RRB NO.	COORD	REMARKS
888-C	3	GATE	MAH	2	E	p	LO .	FAI	ИО	1	0C-1		C-7	
888-D	3	GATE	MAN	2	E	P	LO	FΛΙ	110	1	0C-1		C-7	
845-A	4	GATE	MAN	2	E	P	LO	FAI	NO	1	1-30		D-7	
845-B	4	GATE	MAN	2	E	P	LO	FΛΙ	ио	. 1	0C-1		C-7	
845-C	4	GATE	MAN	2	E	P	LO	FΛΙ	ИО	1	0C-1		C-7	
845-D	4	GATE	МЛИ	2	E	P	LO	FΛΙ	ИО	1	0C-1		C-7	
4-844-A	8	GATE	MAN	2	E	P	LO	FAI	ио	ı	0C-1		B-6	
4-844-B	8	GATE	или	2	E	P	LO	FΛΙ	110	1	0C-1		B-6	
4-891-A	6	GATE	MAN	2	£	þ	LO	FΛΙ	110	1	0C-1		B-9	
4-891-B	6	GATE	MAN	2	E	P	ŕο	FΛΙ	110	1	0C-1		B-9	
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				,	Fl.	ORIDA	POWER !	k Light	COMPAN	Υ				ie 11 oi: 43
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE	CODE	nct/ Pas	NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RBB NO.	COOM	
4-868A	2	GLOBE	# MAN	1	E	P	LO		МО	1	0C-1		C-15	
4-868B	2	GLOBE	MAN	1	E	þ	LO		ИО	ì	0C-1		C-15	
4-868C	2	GLOBE	MAN	1	E	P	LO		Ю	1	0C-1		C-15	
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VALVE TEST PROGRAM

TABLE I TESTS TO CODE

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					FL	ORIDA	POWER 8	LIGHT .	СОМЬ ҮН	Υ				e 12 OL 45
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE	CODE		NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RRB NO.	COORD	เขาเกเหร
MOV-878A MOV-878B	4	GATE GATE	MO MÓ	2	B B	Λ	ио ио	FAI FAI	YES YES	] ] ]	EF-2 EST-3 EF-2 EST-3	10 10	C-7 C-7	
MOV-4-864/	16	GATE	МО	2	B/E	A,	LO	FAI	YES	] ] ]	EF-2 EST-4 OC-1	11	D-2	
MOV-4-864B	16	GATE	МО	2	B/E	Λ	LO	FAI	YES	1 1 1	EF-2 EST-4 OC-1	11	D-2	
MOV-4-862A	14	GATE	МО	2	B/E	Λ	LO .	FΛI	YES	] ] ]	EF-2 EST-5 OC-1	12	Λ-5	
MOV-4-862B	14	GATE	MO.	2	в/е	Λ	LO	FΛΙ	YES	1 1 1	EF-2 EST-5 0C-1	12	Λ-5	
SV4-2905	2	GATE	S0	2	В	Λ	ис	FAI	110	1	EF-2	13	C-10	-
SV-4-2906	2	GATE	\$0·	2	В	٨	нс	FAI	110	1	EF-2	13	C-10	
SV-4-2907	2	GATE	S0	2	В	Λ	nc	FAI	110	1	EF-2	13	C-9	

SYSTEM SAFETY INJECTION SYSTEM (SIS) TITLE

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VALVE TEST PROGRAM

TABLE II EXCEPTIONS TO CODE

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					ľt.	UKIUA	ronck (	LIGHT !	COMP AIN	·				
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE CL.	CODE CAT.		NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RUB NO.	COORD	REMNRKS
SV-4-2908	2	GATE	S0	2	В	۷,	NC	FAI	по	1	EF-2	13	C-9	
SV-4-2909	2	GATE	<b>S</b> 0	2	В	Λ	нс	FAI	110	1	EF-2	13	C-9	
SV-4-2910	2	GATE	SO	2	В.	۸ .	NC	FAI	по	1	EF-2	13	C-9	
4-2918	. 2	CHECK	SΛ	2	С	Λ	NC		Ю	1	*	14	B-10	*see Alternate <sup>*</sup> Testing in Reques
4-2919	2	CHECK	SA	2	С	Λ	ИС		110	ι,	*	14	B-9	for Relief Basis
4~2920	2	CHECK	SA	2	C	Λ	NC	<b></b>	110	1	*	14	B-9	
4-2921	2	CHECK	SΛ	2	С	A	NC		110	1	*	14	B-10	
4-2922	2	CIIECK	SA	2	С	Λ	ИС		Ю	1	*	14	B-9	
4-2923	2	CIIECK	SA ·	2	C.	Λ	ИС	<b>~~</b> ≃	110	1	*	14	B-9	<del></del>
4~874A	2	CIIECK	SΛ	1	С	A	ИС		110	1	EF-2	15	D-17	
4-874B	2	CHECK	SA	1	С	Λ	NC		110	. 1	EF-2	15	D-17	-

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EXCEPTIONS TO CODE

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					Fl.	ORIDA	POWER (	LIGHT (	COMP AN	Υ				ge ar or 45
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE	CODE CAT.	nct/ Pas	NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RRB NO.	COOMD	REMARKS
4-873A	2	CHECK	SA	. 1	С	٨	NC		ИО	1	EF-2	16	C-15	
4-873B	2	CHECK	- SA	1	С	Λ	ИС		110	1	EF-2	16	C-15	
4-873C	2	CHECK	SA	1	С	Λ	нс		011	1	EF-2	16	C-14	
4-875D	10	CHECK	SΛ	}	С	A	NC		110	1	EF-2	17	B-15	
4-875E	10	CHECK	SΛ	J	С	٨	NC		110	1	EF-2	17	B-13	,
4-875F	10	CHECK	SΛ	1	С	Λ	и́С		110	1	EF-2	17	B-11	
4-890A	. 6	CHECK	. SA	2	С	A	ИС		Ю	1	*	18	B-8	* See Alternate Testing in Request
4-8908	6	CHECK	SA	2	С	Λ	NC		ОИ	1	*	18	B-8	for Relief Basis
		•												•
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" VALVE TEST PROGRAM

TABLE II EXCEPTIONS TO CODE

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					FL	ORIDA	POWER	& LIGHT	СОМРАН	Υ				
Valve Number	SIZE	TYPE	ACTU.	CODE	1		NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RRB NO.	COORD	RIMARKS
MOV-4-749A	16	GATE	МО	3	В	А	NC	FAI,	YES	3 3	EF-1 EST-5		D-5	
MOV-4-749B	16	GATE	МО	3	В	Λ	NC	FAI	YES	3 3	EF-1 EST-5		C-6	•
CV-4-739 .	3	GLOBE .	A/0	2	В	Α	NC	FC	YES	2 2 2	EF-2· EF-8 EST-2	1	B-13	
4-738	3	CHECK	SELF	2	С	V.	ИС	<b></b>	ИО	2	EF-2	2	Λ-17	
MOV-4-716A	6	GATE	МО	3	В	Λ	NO	FAI	YES	2 2	EF-2 EST-6	3	B-18	
MOV-4-716B	6	GATE	МО ];	2	В	Λ	NO	FAI	YES	2 2	EF-2 EST-6	4	B-17	
MOV-4-730	6	GATE	МО	2	В	Λ	Ю	FAI	YES	2 · 2	EF-2 EST-6	5	C-13	
FCV-4-626	3	GATE	МО	2	В	Λ	но	FAI	YES	2 2	EF-2 EST-6	6	B-13	b
	BLE II V	N.VES									,			
SYSTEM ALLY COL	U COMD	COOL	(ACCC)	r	HOGHAM	VALVE	TECT I	росоли				1		TABLE T

TITLE AUX. COOL. COMP. COOL. (ACCC.)

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2					FL	ORIDA	POWER 8	LIGHT (	COMP AN	Υ	,		l <del></del> ,	
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE	CODE		NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.		1313 100.	COOLED	REMARKS
4-702 <b>/</b> \	16	CHECK	SELF	3	С	Λ	ИО		ИО	3	EF-1		C-11	
4-702B	16	CHECK	SELF	3	С	٨	ИО		ИО	3	EF-1		B-11	
4-702C	16	CHECK	SELF	3	С	Α	ИО		ИО	3	EF-1		B-11 ·	
4-710A	4	GATE	MAN	3	E	P	L0	FAI	ИО	1	0C-1		C-10	-
4-710B	4	GATE	MAN	3	Ε	P	LO	FAI	ИО	1	0C-1		C-10	
4-770A	2	GATE -	MAN .	3	Ε	P	LO	FAI	МО	1	0C-1		C-7	
4-770B	2	GATE	MAN	3	E	P	LO	FΛΙ	МО	1	0C-1		Λ-9	
4-770C	2	GATE	MAN •	3	E	P	LO	FAI	ИО	1	0C-1		C-7	
4-770D	2	GATE .	MAN	3	E	P	LO	FAI	ИО	1	0C-1		Λ-8	
4-787∧	16	GATE	MAN	3	В	, Λ	по	FAI	МО	3	EF-1		C-10	
												-		
\	<u>.l</u>	1	<u> </u>	<u>'</u>	MOGNAM	<u> </u>	<u> </u>	000000	•	<u>·                                      </u>	<u>'</u>	1		

TITLE AUX. COOL. COMP. COOL (ACCC)

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		J		,	Fl.	ORIDA	POWER	LIGHT (	COMPAN	Υ				: 17 Ot 43
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE CL.	CODE	ACT/ PAS	NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RIB NO.	VALVE COORD	REMARKS
4-787C	16	GATE	MAN	3	В	٨	ио	FAI	ИО	3	EF-1		C-12	
4-787E	16	GATE	MAN	3	В	Λ	МО	FAI	но	3	EF-1		C-15	
4-787F .	16	GATE	MAN	3	. В	Λ	ño	FAI	110	3	EF-1		C-15	
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TITLE AUX. C	OOL. COM	P. COOL.	(ACCC)	Ţ	HOGNAM	AVFAE	TEST P	ROGRAM						TABLE I

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		I	1		FL.	ORIDA	POWER 8	LIGHT (	COMP ለዝ	Υ				
VALVE NUMBER	SIZE	ТҮРЕ	ACTU.	CODE	CODE		NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RRB NO.	COOLD	· REMARKS
PCV-4-1014	1	GLOBE	A/0	2	Λ	Λ	NC	FC	Ю	3 3 1	EF-1 EF-7 SLT-1		D-6	
CV-4-4658N	3/4	DIAPH	A/0	2	В	Λ	NO	FC <sup>-</sup>	YES	3 3 3	EF-1 EF-7 EST-2		C-7	
CV-4-4658B	3/4	DIAPH	A/0	2	Λ	Λ	ИО	FC	YES	3 3 3 1	EF-1 EF-7 EST-2 SLT-1		C-6	
CV~4-4659A	3/4	DIAPH	A/0	2	В	A	Ю	FC	YES	3 3 3	EF-1 EF-7 EST-2		C-7,	
CV-4-4659B	3/4	DIAPH	A/0	2	Λ	Λ	Ю	FC	YES	3 3 3 -1	EF-1 EF-7 EST-2 SLT-1		C-6	
CV-4-4668A	3	DIAPH	A/0	2	В	Λ	Ю	FC	YES	3.3	EF-1 EF-7 EST-2		В-7	

CHART TITLE

WASTE DISPOSAL-LIQUID

F-503189

Title

VALVE TEST PROGRAM

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		· · · · · · · · · · · · · · · · · · ·			FL	ORIDA	POWER	LIGHT	COMP AN	Υ				e 19 Or 43
Valve Number	SIZE	TYPE	ACTU.	CODE CL.	CODE CAT.	NCT/ PNS	NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RRB NO.	COOM	IGMVISK2
CV-4-4668B	3	DIAPII	A/0	2	Λ	Λ	NO	FC	YES	3 3 3	EF-1 EF-7 EST-2 SLT-1		B-6	
		-									•			·
	}													
NO TABLE	E II VAL	VES	•											
WASTE D		LIQUID			HOGRAM IILE	VALVE	TEST P	ROGRAM					TE	TABLE T STS TO CODE

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					FL	ORIDA	POWER 8	LIGHT (	COMPAN	Υ				je 20 OL 43
VALVE NUMBER	SIZE	туре	ACTU.	CODE CL.	CODE	ACT/ PAS	NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	isi Tests	RIUS NO.	COOLID	RIPMARKS
CV-4-519A	3	DIAPH	A/0	2	٨	Λ	Ю	FC	YES	2 2 2 1	EF-2 EF-8 EST-4 SLT-1	1	Λ-12	
4-518	3/4	CHECK	SELF	2	VC	Λ	nc	~-	Ю	2 1	EF-2 SLT-1	2	Λ-11	
CV-4-516	3/8	GLOBE	۸/0	2	۸	Λ	нс	FC	YES	3 3 3	EF-1 EF-7 EST-2 SLT-1		<b>Λ-12</b>	
RV-4-551∧	4	SAFE	SA.	3	С	Λ	ИС		011	1	TF-1		Λ-7	
RV-4-551B	4	SAFE	SA	1	С	Λ	NC		110	1	TF-1		Λ-7	
RV-4-551C	4	SAFE	SA ,	1	С	Λ	NC		110	1	TF-1		Λ-6	
HO TABLE I	I AVFAE	S		1	нослам									

TITLE

REACTOR COOLANT (RCS)

F-503191

THILE

VALVE TEST PROGRAM

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VALVE NUMBER   SIZE   TYPE   ACTU   CODE   CAT.   CAT.   PAS   POS.   PAIL   POS.						Fl.	ORIDA	POWER 8	LIGHT (	СОМЬ УИ	Υ				
CV-4-956B 3/8 GLOBE A/O 2 A A NC FC YES 2 EF-2 1 H-11  CV-4-956C 3/8 GLOBE A/O 2 A A NC FC YES 2 EF-2 1 H-11  CV-4-956D 3/8 GLOBE A/O 2 A A NC FC YES 2 EF-2 1 G-11  CV-4-956D 3/8 GLOBE A/O 2 A A NC FC YES 2 EF-2 1 F-11  CV-4-956D 3/8 GLOBE A/O 2 A A NC FC YES 2 EF-2 1 F-11  CV-4-956D 3/8 GLOBE A/O 2 A A NC FC YES 2 EF-2 1 F-11  CV-4-956D 3/8 GLOBE A/O 2 A A NC FC YES 2 EF-2 1 F-11  NOTE:		SIZE	ТҮРЕ	ACTU.					URE	POS.					REMARKS
CV-4-956B 3/8 GLOBE A/O 2 A A NC FC YES 2 EF-2 1 II-11 CV-4-956C 3/8 GLOBE A/O 2 A A NC FC YES 2 EF-2 1 G-11 CV-4-956D 3/8 GLOBE A/O 2 A A NC FC YES 2 EF-2 1 F-8 EST-2 SLT-1 F-11 CV-4-956D 3/8 GLOBE A/O 2 A A A NC FC YES 2 EF-2 EF-8 EST-2 SLT-1 I F-11 EF-8 EST-2 SLT-1 I EF-8 EST-2 EF-8 EST-2 SLT-1 I EF-8 EST-2 EF-8 EST-2 SLT-1 I EF-8 EST-2 SLT-1 I EF-8 EST-2 SLT-1 I EF-8 EST-2 SLT-1 I EF-8 EST-2 SLT-	CV-4-956A	3/8	GLOBE	A/0	2	۸	Α	NC	FC	YES		EF-8 EST-2	1	11-11	
CV-4-956D 3/8 GLOBE A/O 2 A A NC FC YES 2 EF-8 EST-2 SLT-1  NOTE:	CV-4-956B	3/8	GLOBE	ı	2	А	Λ	NC	FC	YES		EF-8 EST-2	1	K-11	
NOTE:	CV-4-956C	3/8	GLOBE		2	Λ	۸	NC	FC	YES		EF-8 EST-2	1	G-11	
NOTE:	CV-4-956D	3/8	GLOBE	A/0	2	Λ	۸		FC	YES	2 2 2 1	EF-8 EST-2	1	F-11	
	•	ı	ı						-						·
	<del></del>	LE II VA	LVES												

TITLE

F-503193

TESTS TO CODE

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					FL	ORIDA	POWER (	& LIGHT	COMPAN	Υ				
Valve Number	SIZE	ТҮРЕ	ACTU.	CODE	CODE		NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	IST TESTS	RIU3 NO.	COOLAD	RFMARKS
4-753A	10	CHECK	SA	2	C	٨	NC		МО	3	EF-1		F-7	
4-753B	10	CHECK	SA	2	С	٨	NG	"	ИО	3	EF-1		H-7	
HCV-4-758	12	BUTFY	A/0	2	E	Р	LO	FO .	ИО	1	0C-1		G-11	
4-741A	2	GLOBE	MAN	2	B/E	Λ	LO	FAI	ИО	3 1	EF-1 0C-1		D-11	
MOV-4-744A	10	GATE	MÓ ; :	2	В	Α	ИС	FAI	YES	2 2	EF-2 EST-3	ו	8-12	
MOV-4-744B	10	GATE .	МО	2	В	Λ	NC	FAI	YES	2 2	EF-2 EST-3	1	B-12	
										-				•

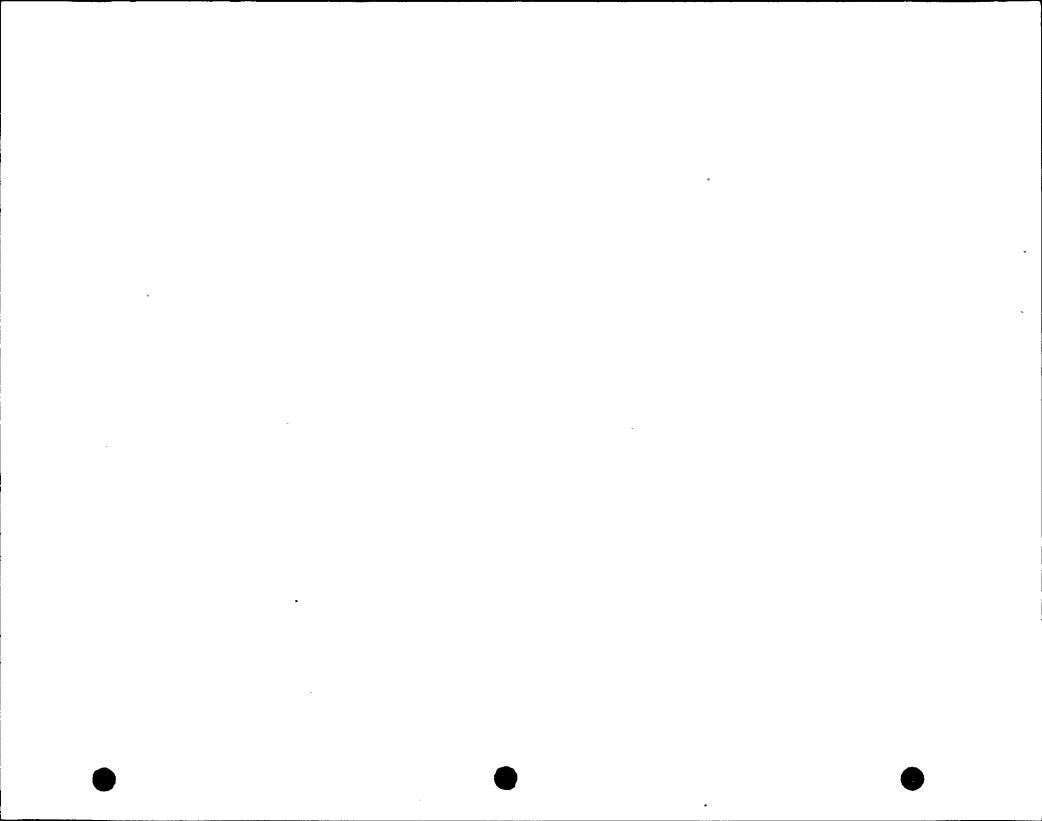
SYSTEM AUX. COOL. RES. HEAT REM. (RHR)

TITLE

VALVE TEST PROGRAM

TABLE L TESTS TO CODE

TITLE F-503194



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ı					FL	ORIDA	POWER &	& L.IGIIT	COMPAN	Υ				e 23 or 43
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE CL.	CODE CAT.	ACT/ PAS	NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RRB NO.	COOLED	REMARKS
4-752A	14	GATE	MAN	2	E	p	,F0	FAI	ИО	1	00-1		E-5	
4-7528	14	GATE	MAN	2	E	P	LO	FΛΙ	NO	1	0C-1		G-5	
4-754 <b>N</b>	10	GATE -	MAN	2	Ε	P	L0	FAI	МО	1	0C-1		F-8 <sub>-</sub>	
4-754B	10	GATE	МЛИ	2	E	P	LO	FAI	ИО	1	0C-1		11-8	
4-757∧	10	GATE ·	MAN	2	E	P	L0	·FΛΙ	ио	1	0C-1		F-9	
4-757B	10	GATE	MAN	2	Ε	P	L0	FAI	ИО	1	0C-1		11-9	
4-759∧	10	GATE	MAN	2	E	P	LO	FΛΙ	ИО	1	0C-1		F-10	
4-759B	10	GATE	MAN	2	E	P	LO	FAI	NO	1	0C-1		11-10	•
	_													

SYSTEM AUX. COOL. RES. HEAT REM. (RHR) TITLE

F-503194

PROGRAM

VALVE TEST PROGRAM

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					FL	ORIDA	POWER	& LIGHT	COMPAN	Υ	<del></del>			<u>le 24 of 43</u>
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE	CODE	PAS ·	norm. Pos.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RRB NO.	CCOMD	REMARKS
MOV-4-751	14	GATE	MO	1	ΛE	۸	LC	FAI	YES	] ] ]	EF-5 EST-5 SLT-1 OC-1	2	C-5	-
MOV-4-750	14	GATE	МО	ן	В	Α	NC	FAI	YES	] ]	EF-5 EST-5	3	B <b>-</b> 5	
					•									
		-								•				
			,											
575TEM				15	ROGRAM									

AUX. COOL. RES. HEAT REM.

VALVE TEST PROGRAM

TABLE LI EXCEPTIONS TO CODE

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			<del></del>		FL	ORIDA	POWER 8	LIGHT (	СОМРАН	Y	·			E 23 01 43
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE	CODE	ACT/ PAS	NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RRU NO.	COOM	RIMARKS
NO TABLE I OR TABLE II VALVES										·				
						   								·
													-	-
	z									-	-			
			,											
			•			;		-						
SYSTEM					PROGRAM	1441.115	TEGT	DOCE NA						TABLE 1
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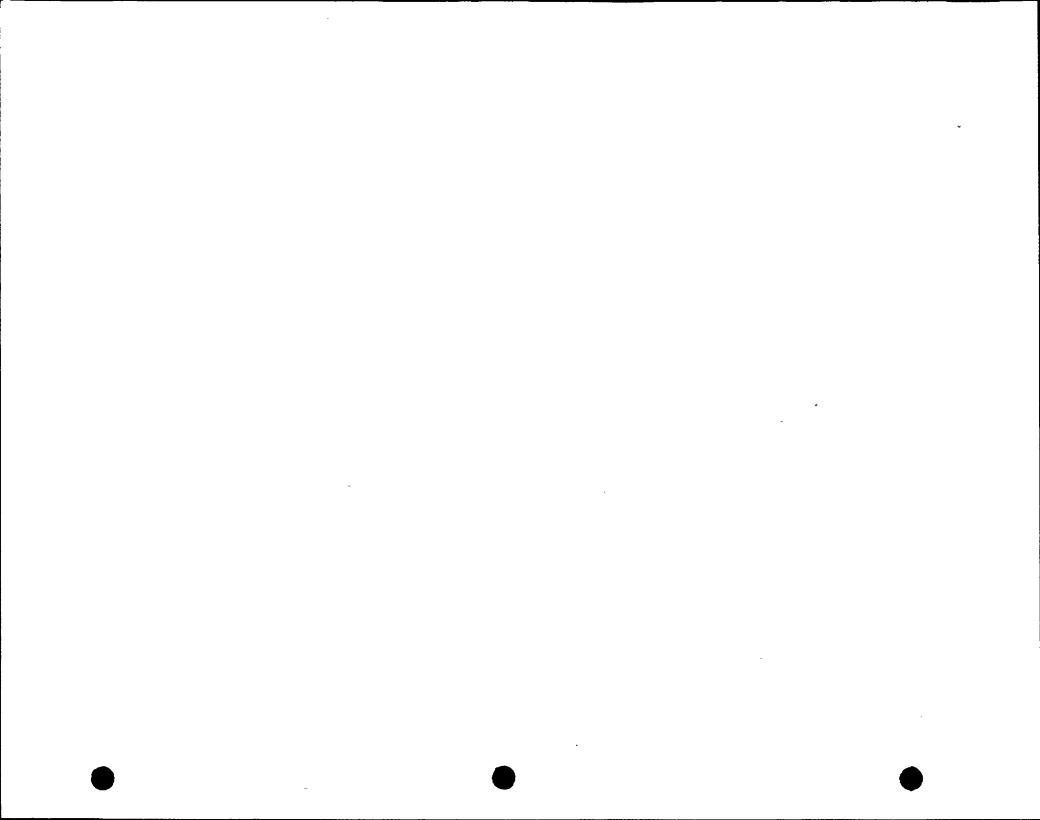
VALVE	_												A	
NUMBER	SIZE	TYPE	ACTU.	CODE	CODE.		NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RRB NO.	VALVE	RIMARKS
P0V-4-2604	26	POWER ASST'D CHECK		2	С	Λ	ИО	FC	YES	2 2 2	EF-2 EF-8 EST-1	1	B-9	,
POV-4-2605	26	POWER ASST'D CHECK	A/CYL	2	C	Λ	но	FC	YES	2 2 2	EF-2 EF-8 EST-1	1	B-10	
POV-4-2606	26	POMER ASST'D CHECK	v,	2	С	۸	110	FC .	YES	2 2 2	EF-2 EF-8 EST-1	1 -	B-11	
MOV-4-1403	3	GATE	МО	2	8	Λ	ИС	FAI	YES	3 3	EF-1 EST-3		C-12	
MOV-4-1404	3	GATE	MO*	2	В	۸ :	ИС	FAI	YES	3	EF-1 EST-3		D-12	
MOV-4-1405	3	GATE	, MO	2	В	Λ	ис	FΛΙ	YES	3 3	EF-1 EST-3	<b></b>	D-12	
RV-4-1400	6	RELIEF	SELF .	2	С	Λ	ИC		NO	1	TF-1		C-10	
RV-4-1401	6	RELIEF	SELF	2	С	Λ	NC		110	1	TF-1	~-	C-9	

STEAN\_SYSTEM

CHART
TITLE

F-502027

VALVE TEST PROGRAM



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	1				Fl.	ORIDA	rower 8	LIGHT (	COMPAN	Υ				
VALVE NUMBER	SIZE	TYPE	лсти.	CODE	CODE		NORM. POS.	FAIL- URE MODE:	REM. POS. IND.	TEST PER.	ISI TESTS	RRB NO.	COORD	REMARKS
RV-4-1402	6	RELIEF	SELF	2	С	٨	ИС		110	1	TF-1	<b>-</b> -	C-10	
RV-4-1403	6	RELIEF	SELF	2	С	А	ИС		ОИ	1	TF-1		C-9	
RV-4-1405	6	RELIEF		2	С	٨	NC		110	1	TF-1		B-10	
RV-4-1406	6	RELIEF	SELF	2	С	A	NC		по	1	TF-1		B-10	-
RV-4-1407	6	RELIEF	SELF	2	С	٨	NC		ИО	1	TF-1		B-11"	
RV-4-1408	6	RELIEF	SEI.F	2	С	Λ	ис		NO	1	TF-1		B-10	
RV-4-1410	6	RELIEF	SELF	2	С	٨	NC		NO	1	TF-1		G-11	
RV_4-1411	6	RELIEF	SELF	2	С	٨	NC		110	ī	TF-1		C-11	
RV-4-1412	6	RELIEF	SELF	2	С	٨	NC		110	1	TF-1		C-11	
RV-4-1413	6	RELIEF	SELF	2	С	٨	.NC		ИО	1	TF-1		C-10	
RV-3440	4	RELIEF	SELF	3	С	٨	ИС		.011	1	TF-1		E-12	,
SYSTEM	<u>'</u>	<u> </u>	<u> </u>	<del>'</del>	ROGRAM	<u> </u>	<u> </u>		<u>'                                      </u>	<u> </u>	·			

STEAM\_SYSTEM

TITLE F-502027 11116

VALVE TEST PROGRAM

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,					FL	.ORIDA	POWER	k LIGHT	COMPAN	Υ	•			
VALVE NUMBER	SIZE	ТҮРЕ	AÇTU.	CODE CL.	CODE CAT.		NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RRB NO.	COOLD	REMARKS
RV-3441	4	RELIEF	SELF	3	С	A	NC		110	1	TF-1		E-12	
RV-3442	4	RELIEF	SELF	.3	С	А	NC .		ИО	1	TF-I		F-12	
4-10-083	4	CHECK	SELF	3	С	۸	nc		NO	3	EF-1		E-12	
4-10-085	4	CHECK	SELF	3	С	Α	ИС	** ==	110	3	EF-1		E-12	
4-10-087	4	CHECK	SELF	3	С	A	NC		ОИ	3	EF-1		F-12	
4-10-82A	4	GLOBE	MAH	3	Ε	P	LO	FAI	110	1	0C-1		E-11	
4-10-82B	4	GLOBE	MAN	3	E	P	LO	FAI	NO	1	0C-1		E-11	
4-10-84N	4	GLOBE	MAN	3	E	P	L0	FAI	110	1	0C-1		E-11	*
4-10-84B	4	GLOBE	MAII	3	E	P	L0	FΛI	011	. 1	0C-1		E-1]	
4-10-86A	4	GLOBE	MAN	3	E	P	LO	FAI	ИО	1	0C-1		F-11	
4-10-86B	4	GLOBE	MAN	3	E	P	LO	FΛΙ	110	1	0C-1		F-11	
SYSTEM		<u> </u>	1	<u>,                                    </u>	ПОСЛАМ		·				<u> </u>	<u> </u>		<del></del>

SYSTEM

STEAM SYSTEM

TITLE F-502027

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VALVE TEST PROGRAM

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k.					FL	ORIDA	POWER	LIGHT	COMPAN	Υ				0 27 01 13	
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE CL.			NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RRB NO.	VALVE	REMARKS	
4-10-119	3	S/CHK	MAN/SA	3	E/C .	A	TO/VC		МО	1 3	0C-1 EF-1		C-12		
4-10-219	3	S/CHK	MAN/SA	3	E/C	A	LÓ/NC		МО	1 3	0C-1 EF-1		D-12		
4-10-319	3	S/CHK	MAH/SA	3	E/C .	A	LO/NC		011	1 3	0C-1 EF-1		D-12		
4-10-120	4	S/CHK	MAN/SA	3	E/C · ·	A	TO/MC		011	1 3	0C-1		C-12		
4-10-220	4	S/CHK	MAN/SA	3	E/C	A	IÒ/NC	<u>:</u> _	110	1 3	0C-1 EF-1		D-12		
4-10-320	4	S/CHK	MAN/SA	3	e/C.	A.	IÒ/NC		NO	1 3	0C-1 EF-1		D-12		,¹
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							-								
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SYSTEM				19	ROGRAM	<u> </u>			<u> </u>	<u> </u>	<u>'</u>	<u>'                                    </u>	ا	'INDIE T	

SYSTEM
TITLE STEAM SYSTEM
CHART
TITLE
F-502027

PROGRAM

VALVE TEST PROGRAM

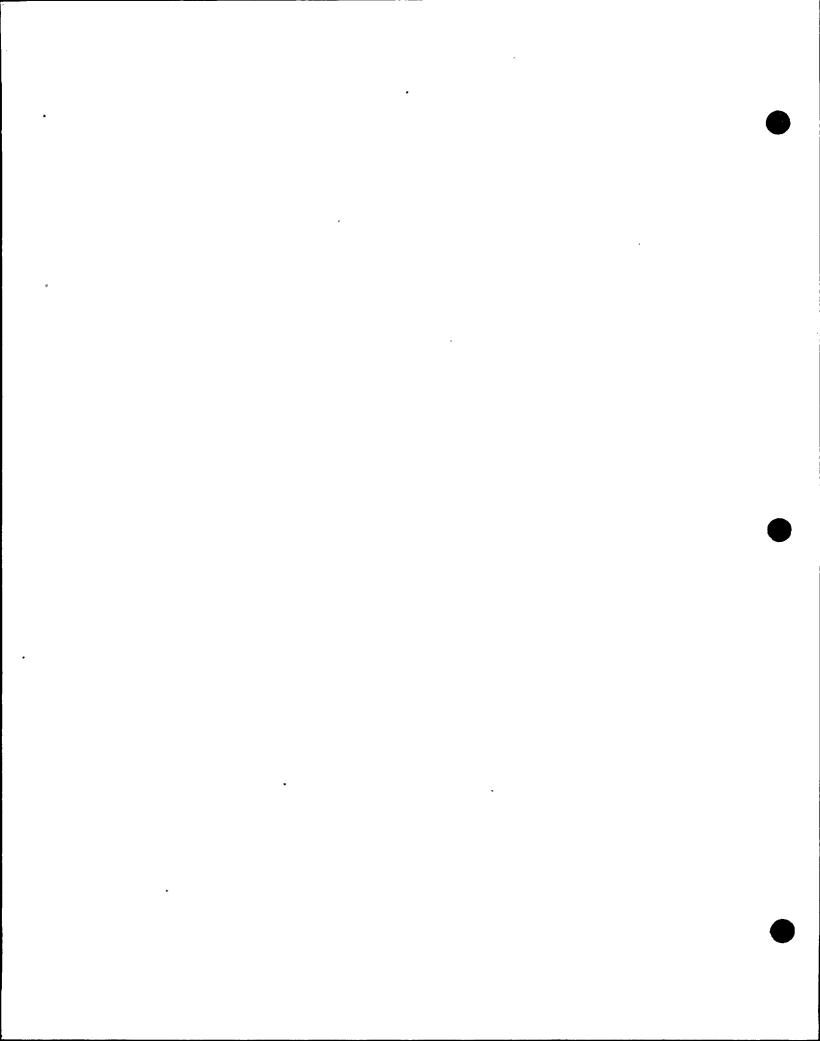
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		1			Fl.	ORIDA.	POWER 8	LIGHT (	COMPAN	Υ				
VALVE NUMBER	SIZE	TYPE .	ACTU.	CODE	CODE		NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RRB NO.	COORD	REMARKS
MOV-4-1425	1	GATE	110	2	В	Λ	МО	FAI	YES	2 2	EF-2 EST-3	1	E-11	
MOV-4-1426	1	GATE	МО	2	В	Λ	.но	FAI	YES	2	EF-2 EST-3	1	F-11	
MOV-4-1427	1	GATE	мо	2	В	Λ	NO	FAI	YES	2 2	EF-2 EST-3	1	F-11	
MOV-4-1410	2	GLOBE	МО	2	В	٨	110	FAI	YES	2 2	EF-2 EST-3	2	C-10	
MOV-4-1411	2	GLOBE	М0	2	В	Λ	NO	FAI	YES	2 2	EF-2 EST-3	2	C-10	
MOV-4-1412	2	GLOBE	MO .	2	В	Λ	110	FAI	YES	2 2	EF-2 EST-3	2	C-11	
CV-4-2900	14	CHECK	N/0 <sub>.</sub>	2	С	Λ	МО	FAI	ИО ,	2-	EF-2	3	D-7	
CV-4-2901	14	CHECK	A/0	2	С	Λ	NO	FAI	NO	2	EF-2	3	D-8	
CV-4-2902	14	CIIECK	۸/0	2	С	Α,	Ю	FAI	110	2	EF-2	3	D-9	

CONDENSATE AND FEEDWATER

F-502028

VALVE TEST PROGRAM



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					FL	ORIDA	POWER 8	LIGHT	COMPAN	Υ				
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE CL.	CODE	ACT/ PAS	NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RRIS NO.	COORD COORD	REMARKS
CV-4-2816	4	PLUG	AO	2	B .	٨	NC	FC	ИО	3 .	EF-1 EF-7		B-10	•
CV-4-2817 ·	4	PLUG-	ΛΟ	2	В	۸	NC	FC	но	3 3	EF-1 EF-7		C-11	·
CV-4-2818	4	PLUG	AO	2	8	Α	ИС	FC	Ю	3 3	EF-1 EF-7		C-11	
CV-4-2831	4	PLUG	ΛΟ	2	В	Α	нс	FC	NO	3 3	EF-1 EF-7		B-10	
CV-4-2832	4	PLUG	ΑΟ	2	В	Λ	NC	FC	по	3 3	EF-1 EF-7		B-11	
CV-4-2833	4	PLUG	AO	2	В	Λ	NC	FC	110	3 3	EF-1 EF-7		C-11	
20-143	6	CHECK	SELF	3	С	Λ	ИС		ИО	3	EF-1		B-12	
20-243	6	CHECK	SELF	3	С	Λ	NC		NO	3	EF-1		C-12	
20-343	6	CHECK	SELF	3	С	A	NC		110	3	EF-1		D-12	

CONDENSATE AND FEEDWATER

THILE F-502028

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VALVE TEST PROGRAM

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					FL	ORIDA	POWER 8	LIGHT (	COMPAN	Y	<b></b>		( <del></del>	
VALVE NUMBER	SIZE	TYPE	VČIU.	CODE CL.	CODE		NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RIB 110.	COOM	REMARKS
4-20-140	4	CIIECK	S/A	2	С	Α	NC		110	3	EF-1		B-10	
4-20-240	4	CHECK	S/A	2	С	Λ	IIC		но	3	EF-1		B-10	
4-20-340	4	CHECK	s/A	2	С	Α	ИС		но	3	EF-1		C-11	
4-20-401	8	CHECK	S/A	3	С	Α	NC.		но	3	EF-1		۸-11	
4-20-139	1	GLOBE	MAN	2	E	P	LO	FAI	но	1	0C-1		C-10	
4-20-239	1	GLOBE	MAN	2	E	p	LO	FAI	110	1	0C-1		C-10	
4-20-339	1	GLOBE	MAN	2	E	P	LO	FAI	110	1	0C-1		C-10	
4-20-141	4	GLOBE	MAN	3	Ε	P	LO	FAI	110	1	0C-1		B-11	
4-20-241	4	GLOBE	MAN	3	Ε	P	LO	FAI	ИО	1	0C-1		B-12	
4-20-341	4	GLOBE	MAN	3	E	P	LO	FAI	ио	1	0C-1		C-12	
4-20-142	6	GLOBE	MAN	3	E	P	LO	FAI	110	1	0C-1		B-12	
SYSTEM		·	<del></del>	-	MARDON							1		TARLE

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CONDENSATE AND FEEDWATER

CHART

F-502028

THUE

VALVE TEST PROGRAM

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					FL	ORIDA	POWER	& LIGHT	COMPAN	Υ			ـــــــــــــــــــــــــــــــــــــ	
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE	CODE	ACT/ PAS	NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	isi Tests	RRB NO.	VALVE: COORD	REMARKS
4-20-242	6	GLOBE	MAN	3	Ε	p	LO	FAI	МО	1	0C-1		C-12	-
4-20-342	6	GLOBE	MAN	3	E	. p	L0	FAI	по	1	0C-1		D-12	-
4-20-144	6	GLOBE	МАН	3	Ε	P	LO	FAI	NO	1	0C-1		B-13	
4-20-244	6	GLOBE	HVII	3	E	P	LO	FAI	110	1	0C-1		C-13	
4-20-344	6	GLOBE	MAN	3	E	P	ĹO	FAI	ИО	1	0C-1		D-13	- 1
4-20-400	10	GLOBE	MAN	3	E	P	LO	FAIԴ	110	1	0C-1		Λ-12	
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SYSTEM			•	E	HOGRAM		<del></del>							TADE IS

CONDENSATE AND FEEDWATER F-502028

TITLE

VALVE TEST PROGRAM

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					FL	ORIDA	POWER 8	LIGHT (	COMPAN	Υ			ļ	C 31 01 13
VALVE NUMBER	SIZE	ТУРЕ	ACTU.	CODE CL.	CODE	ACT/ PAS	NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RR3 10.	COOLID	REMARKS
4-40-204	2	GATE	MAN	2	ΛE	Λ	LÇ.	FAI	но	2 1 1	EF-2 0C-1 SLT-1	1	Λ-10	-
4-40-205	2	CHECK	SELF	2	ΛC	Λ	NC		110	2 1 ·	EF-2 SLT-1	2	Λ-11	
4-40-203	2	GATE	MAN '	2	BE	۸	ГĊ	FAI	NO	2 1	EF-2 0C-1	3	Λ-10	
CV-4-2803	2	PLUG .	A/0	2	ΛE	Р.	L0	F0	ИО	]	0C-1 SLT-1		C-8	
				i i										
		} }	,											
						d								
I EVELEM					PHOGRAM	<u> </u>	<u> </u>		<u> </u>	<u> </u>	<u> </u>	<del>                                     </del>	l	<u> </u>

SYSTEM

LURE OIL SERVICE & HISTR. ALR

TITLE F-502030

PHOGRAM TITLE

VALVE TEST PROGRAM .

Page 35 of 43

		I			FL	ORIDA	POWER	& LIGHT	COMPAN	Υ				
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE CL.	CODE	ACT/ PAS	NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	ISISIS NO.	COORD	REMARKS
4-40-336	2	CHECK	SA	2	AC	Λ	NO		. 110	1	EF-2 SLT-1	4	C-8	
								-	•					
			,											
									,					
MARIEN LINE U		CE & INS	TD 415	10	NOGRAM ITLE		VALVE	TEST PRI	OCRAM					Whie it

LUBE OIL SERVICE & INSTR. AIR CHART TITLE F-502030

TABLE 11
EXCEPTIONS TO CODE

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					FL	ORIDA	POWER (	& LIGHT	СОМЬ УИ	Υ				3 36 OF 43
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE	CODE		NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RUU3 NO.	VALVE	REMARKS
4-50-311	24	CHECK	sa.	3	С	А	по		ИО	3	EF-1		F-3	
4-50-321	24	CHECK	SA	3	С	A	ИО		ИО	3	EF-1		F-4	
4-50-331	24	CHECK	SA	3	С	Α	NO		NO	3	EF-1		F-5	
						·								•
		 		-					;					
						i i								
								-					-	•
75													>	
			,	٠										
NOTE:														•
NO TAB	LE II VA	LVES												
TITLE INTAKE	COOF MV.	TER	,		HOGRAM HER	VALVE	TEST I	ROGRAM						TABLE I

F-502031

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		1			FL	ORIDA	POWER	k light (	COMPAN	Υ				
Valve Number	SIZE	TYPE .	ACTU.	CODE CL.	CODE CAT.		norm. Pos.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	isi Tests	RRB NO.	COOLED	RIMARKS
70-006A	2	CHECK	SELF	3	С	Λ	NC		NO	3	EF-1		B-4	
70-006B	2	CHECK	SELF	3	С	٨	NC.		<b>ИО</b>	3	EF-1		B-4	•
CV-2046A	2	PLUG	A/0	3	В	Λ	NC		Ю	3	EF-1		C-3	
CV-2046B .	2	PLUG	A/0	3	В	Λ	NC		ОИ	3	EF-1		C-5	
SV-3522A	1 1/2	GLOBE	S0	3	В	۸	NC		ИО	3	EF-1		D-4	
SV-3522B	1 1/2	GLOBE	S0	3	В	А	NC	-~	NO	3	EF-1		D-5	
-														
	1		1											
			» »								]			
<u>NOTE</u> : NO TAB	LE II VA	LVES	•											
TITLE DIESEL	OIL		***************************************		HOGRAM	VALVI	TEST	PROGRAM	·	·		T	A	TABLE 1

CHART

F-502033

Page 38 of 43

•					FL	ORIDA.	POWER 8	LIGHT (	COMP VM	Υ			•——-	
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE	CODE		NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RRB NO.	VALVE	REMARKS
MOV-4-1417	10	GATE	МО	2	B	Λ	ИО	FAI	YES	2 2	EF-2 EST-4	1	B-8	
MOV-4-1418	10	GATE	МО .	2	В	Λ	ио	FAI	YES	2 2	EF-2 EST-4	1	C-10	
CV-4-2903	10	BUTFY	A/0	2	В	Λ	ИО	FO	YES	3 3 3	EF-1 EF-7 EST-3		A-8	
CV-4-2904	10	BUTFY	A/0	2	В	Λ	NO	FO	YES	3 3 3	EF-1 EF-7 EST-3		B-8	
CV-4-2905	10	BUTFY	A/0	2	В	Λ	NO	F0	YES	3 3 3	EF-1 EF-7 EST-3		B-8 -	·
CV-4-2906	10	BUTFY	A/0 ·	2	В	Λ	NC	F0	YES	3 3 3	EF-1 EF-7 EST-3		Λ-11	
CV-4-2907	10	BUTFY	A/0	2	В	Λ	NC	F0	YES	3 3 3	EF-1 EF-7 EST-3		B-11	

TITLE PRIMARY MAKEUP AND CONT. COOL.

F-502036

TITLE

THOGRAM

VALVE TEST PROGRAM

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					FL	ORIDA	POWER &	k LIGHT	COMP AN	Υ			109	
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE	CODE		NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	isi Tests	RRB NO.	COORD	REMARKS
CV-4-2908	10	BUTFY	A/0	2	В	A	NC	FO	YES	3 3 3	EF-1 EF-7 EST-3		C-11	,
CV-4-2810	6	PLUG	A/0	2	В	Λ	NO	FC	YES	3 3 3	EF-1 EF-7 EST-3		Λ-11	
CV-4-2812 .	6	PLUG	A/0	2	В	A	NO	FC	YES	3 . 3 3	EF-1 EF-7 EST-3		B-11	
CV-4-2814	6	PLUG	A/0	2	В	٨	NO	FC	YES	3 3 3	EF-1 EF-7 EST-3		B-11	
4~10-567	2	CHECK	SELF	2	ΛC	P	NC		NO	1	SLT-1		D-6	
		,												
	LE II VA	*	•											
TITLE PRIMAR	Y MAKEUP	VND CON.	r. cool.		HOGRAM	VALVI	E TEST	PROGRAM						TABLE I

TABLE I TESTS TO CODE

TITLE

F-502036

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	·	············			FL	ORIDA	POWER (	& LIGHT	COMPAN	Y				je 40 Or 43
Valve Number	SIZE	TYPE	ACTU.	CODE CL.	CODE CAT.		NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RRB .OM	VALVE COORD	RI-MARKS
IIV-4-1	2	DIAPH	MAN	2	E	Λ	LC	FAI	ИО	2 1	EF-2 0C-1	1	F-10	_
NV-4-2	2	DIAPH	MAN	2	ΛE	Α	LC	FAI	но	2 1 1	EF-2 0C-1 SLT-1	2	F-10	
11V-4-3	2	DIAPH	MAH	2	E .	Λ	LC	FAI	ИО	2 1	EF-2 0C-1	7	F-10	
IIV-4-4	2	DIAPH	MAN	2	VE	۸	LC	FAI	NO	2 1 1	EF-2 0C-1 SLT-1	2	F-10	
POV-4-2600	.48	BUTFY	۸٥ . ;	2	Λ	P	tic	FC	YES	1	SLT-1	<b></b>	B-2	
POV-4-2601	48	BUTFY	АО	2	٨	P	нс	FC	YES	1	SLT-1		B-3	-
P0V-4-2602	54	BUTFY	ΛΟ "	2	Λ	Р	NC	FC	YES	1	SLT-1		D-2	
POV-4-2603	54	BUTFY	۸٥ -	2	۸	P	NC	FC	YES	1	SLT-1		D-3	
3731614					ROGRAM							<u> </u>	اا	

SYSTEM TITLE

CONTAINMENT VENTILATION

F-502037

PHOGRAM

VALVE TEST PROGRAM

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			, v		FL.	ORIDA	POWER	R LIGHT	СОМЬ УИ	Υ	_			
VALVE NUMBER	SIZE	ТУРЕ	АСТО.	CODE CL.	CODE	ACT/ PAS	NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RIU 110.	COORD	સિમપાસડ
CV-4-2819	2	PLUG	AO	2	Λ	Λ	110	FC	YES	3 3 3	EF-1 EF-7 EST-3 SLT-1		D-2	
CV-4-2826	2	PLUG	AO	2	۸	Α	ОО	FC	YES	3 3 3	EF-1 EF-7 EST-3 SLT-1		D-1	
SV-4-2911	]	PLUG	S0 ·	2	Λ	А	NO	FC	YES	3 3 3 1	EF-1 EF-7 EST-3 SLT-1		C-8	
SV-4-2912 .	7	PLUG	S0	2	Λ	Λ	NO	FC	YES .	3 3 3 1	EF-1 EF-7 EST-3 SLT-1		D-8	
SV-4-2913	1	PLUG	S0	2	В	٨	ИО	FC	YES	3 3 3	EF-1 EF-7 EST-3		C-8	

CONTAINMENT\_VENTILATION CHÂNT TITLE

F-502037

VALVE TEST PROGRAM

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	FLORIDA POWER & LIGHT COMPANY  VALVE SIZE TYPE ACTU. CODE CODE ACT/ NORM. FAIL- REM. TEST ISI RER VALVE REMARKS													
VALVE NUMBER	SIZE	ТУРЕ	vcia.	CODE	CODE CAT.	ACT/ PAS	NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RIU NO.	COOM	REMARKS
4-11-003	2	CHECK	S/A	2	A/C	Λ	по		Ю	]	EF-2 SLT-1	3	D-7	
•								,						·
						•								
														•
													•	
,								•						
TYDE CONTAINMENT VENTILATION SYSTEM  TITLE F-502037  VALVE TEST PROGRAM  EXCRUTIONS TO CODE														

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	<del></del>				FL	ORIDA	POWER	& LIGHT (	СОМРАН	Υ			I	
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE	CODE	act/ Pas	NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	RRIJ NO.	COORD	REMARKS
CV-4-2821	3	PLUG .	A/0 ^	2	Λ	۸	Ю	FC	YES	3 3 3	EF-1 EF-7 EST-2 SLT-1		C-9	,
CV-4-2822	3	PLUG	A/0	2	Λ	Λ	NO	FC	YES	3 3 3 1	EF-1 EF-7 EST-2 SLT-1		C-9	
NOTE:	LE II VA	LVES	·			-		-						
CONT.		STE DRAIN	IS & VENT	s	PROGRAM	VALV	E TEST	PROGRAM						TABLE I TS TO CODE

			FLORIC	OA POWER & LIGH	T COMPANY			
PENE.	VALVE NUMBER	LEAKAGE CC/MIN	PENE. NO.	VALVE NUMBER	LEAKAGE CC/MIN	PENE. NO.	VALVE NUMBER	LEAKAGE CC/MIN
1	MOV-4-751	10,000	19A	MOV-4-880A	5,000	33	SV-4-2911	2,000
.2	CV-4-516 ·	500	19B	140y-4-880B	5,000	34	4-40-204	2,000
6	CK-4-518	2,500	20	CV-4-956C	1,000	34	4-40-205	2,000
7	CV-4-519A	2,000	23	CV-4-2821	2,000	35	POV-4-2600	15,000
8	CV-4-956A	1,000	23	CV-4-2822	2,000	35	POV-4-2601	15,000
9	CV-4-956B	1,000	241	4-297A	7,000	36	POV-4-2602	15,000
10	CV-4-4658B	500	241	CK-4-298A	2,000	36	P0V-4-2603	15,000
10	PCV-4-1014	2,000	24B	·4-297B	1,000	42	CV-4-855	500
14	CV-4-200A	3,000	24B	CK-4-298B	2,000	47	CK-4-10-567	4,000
14	CV-4-200B	3,000	24C	4-297C	1,000	51	117-4-4	1,000
14	CV-4-200C	3,000	24C	CK-4-298C	2,000	52	CV-4-4668B	2,000
14	CV-4-204	1,000-	25	MOV-4-381	2,000	54/	MOV-4-861A	7,000
15	IICV-4-121	2,000	29	CV-4-2803	2,000	54B	MOV-4-861B	7,000
15	4-333	2,000	29	CK-4-40-336	4,000	55	CV-4-956D	1,000
15	CK-4-312C	4,000	31	CV-4-4659B	500	63	CV-4-2819	2,000
16	11V-4-2	1,000	32	CK-4-11-003	2,000	63	CV-4-2826	2,000
17	4-895V	500	32	SV-4-2912	2 000			
				•				•
SYSTEM TITLE		<u>,                                     </u>	PROGRAM TITLE VA	LVE TEST PROGRA	<del>!</del> М			
CHART	ARIOUS			······································			TABLE VALVE LEAD	

			FLORI	DA POWER & LIGH	T COMPANY			·
PENE.	VALVE NUMBER	LEAKAGE CC/MIN	PENE. NO.	VALVE NUMBER	LEAKAGE CC/MIN	PENE. NO.	VALVE NUMBER	LEAKAGE CC/MIN
1	MOV-4-751	10,000	19A	MOV-4-880A	5,000	33	SV-4-2911	2,000
·5	CV-4-516 -	500	198	110V-4-880B	5,000	34	4-40-204	2,000
6	CK-4-518	2,500	20	CV-4-956C	1,000	34	4-40-205	2,000
7	CV-4-519A	2,000	23	CV-4-2821	2,000	35	POV-4-2600	15,000
8	CV-4-956A	1,000	23	CV-4-2822	2,000	35	POV-4-2601	15,000
9	CV-4-956B	1,000	24/	4-297 <b>/</b>	1,000	36	POV-4-2602	15,000
10	CV-4-4658B	500	241	CK-4-298A	2,000	36	P0V-4-2603	15,000
10	PCV-4-1014 .	2,000	248	~4-297B	1,000	12	CV-4-855	500
14	CV-4-200A	3,000	24B	CK-4-298B	2,000	47	CK-4-10-567	4,000
14	CV-4-200B	3,000	24C	4-297C	1,000	51	117-4-4	1,000
14	CV-4-200C	3,000.	24C	CK-4-298C	2,000	52	CV-4-4668B	2,000
14	CV-4-204	1,000	25	MOV-4-381	2,000	54/	MOV-4-861A	7,000
15	HCV-4-121	2,000	29	CV-4-2803	2,000	54B	MOV-4-861B	7,000
15	4-333	2,000	29	CK-4-40-336	4,000	55	CV-4-956D	1,000
15	CK-4-312C	4,000	31	CV-4-4659B	500	63	CV-4-2819	2,000
16	117-4-2	1,000	32	CK-4-11-003	2,000	63	CV-4-2826	2,000
17	4-895V	500	32	SV-4-2912	2 000			
								•
TITLE \	ARIOUS	_!	LILE AV	LVE TEST PROGRA	<u> </u>			
TITLE V	ARIOUS					······································	TABLE VALVE LEAI	: I.A " (AGE RATES

	4		FLORIDA PO	OWER & LIGHT COM	PAHY		
				mrem by	(s. b. 841241113)	ne :	
PUMP	PUMP NO.	Speed,	Inlet	TEST PAI		vibration	Bearing
	,	n n	Pressure,		Rate,		Temperature,
Auxiliary Feed	P2A	Yes	Yes	· Yes	Yes (3)	Yes	Yes
-	P2B	Yes	Yes	· Yes	Yes (3)	Yes	Yes
	P2C .	Yes	Yes	Yes · ·	Yes <sup>(3)</sup>	Yes .	Yes
Intake Cooling	4-P9h .	tio	Yes	Yes	Yes <sup>(3)</sup>	Yes	но
Water	4-P9B	No	Yes	Yes .	Ye <sup>(3)</sup>	Yes	но .
•	4-P9C	llo	Yes	Yes	Yes (3)	Yes	110
Residual Heat	4-P210A	No.	Yes	ХGа ·	No (2)	. Yes	llo
Removal ·	4-P210B	tlo	Yes .	Yes	110 <sup>(2)</sup>	Yes .	tto
Component Cooling	4-P211λ ·	No	Yes	Yes	Yes (3)	· Yes	Yes
	4-P211B	tlo	Yes	Yes	Yos (3)	ĺ	Yes
	4-P211C	110	Yes	. Yes	Yes (3)	ХGa	Yes
Containment Spray	4-P214A	llo	Хea	Yes	No (2)	Yen	Yes
	4-P214B	110	Х6а.	Yes	No <sup>(2)</sup>	ХGв	Yes
		·					
enognau HYLE PUMP TEST PI	ROGRAM .	:				V1 3.18AT	

!!!!

			FLORIDA P	OWER & LIGHT COM	PANY	,	
	4			•			
риир	PUMP NO.	TEST PARAMETERS					
		Speed,	Inlet Pressure,	Differential Pressure,	Rate,	Vibration Amplitude,	Bearing Temperature,
·.		11	Pi	ΔР	Ω	v	т <sub>ь</sub> (1)
High Head Safety Injection	P215A	tlo	Yes	Yes	110 <sup>(2)</sup>	Yes	Yes
sarety injection	P215B	110	Yes	Yes	No <sup>(2)</sup>	Yes	Yes
-	P215C	oft	Yes	Yes	No(2	Yes	Yes
	P215D	Но	Yes	Yes	Ho(2	Yes	Yeş
				•			
				-			•
	,						
<u> NOTE (1):</u> BE	ARING TEMPERATI	RE, Tb,	IS MEASUREL	OHLY OH THE ANI	UAL TES	<u>T</u>	• •
<u> 110TE (2): FI</u>	XED HYD. RESIS	ANCE SYS	CEM .	٠.			•
<u>ноте (з): У/</u>	RIABLE HYD. RE:	ISTAIICE	<u>System</u>		٠		
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	,						
PROGRAM FIFES PROPERTY PR				Table iv			

j	d ted (1864		ATTACHME	NT B-	1		
	Re:	Turkey Po Docket No	int Unit.	4	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	6 Agrid   p rd +00 4456 av 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	A CONTRACTOR MANAGEMENT AND THE
-		Revised	Pump and	Value Test	Program		
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	R 17 9 P h 4 55 P P P		na na mar Almin D F B'illion i Mora i India	n ga ging dar in manir A 18 tin man	na mala armininterare armininte	Ottobal (1887) of all the conference of mobile of the	074 to 000000 07400
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	2 AND		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2				
	2 AND STREET OF THE STREET OF	The second of th					

SYSTEM: Chemical and Volume Control

1. Valve: CV-4-200A, CV-4-200B, and CV-4-200C

Category: A Class: 1

Function: Provides parallel letdown flow paths through the letdown

orifices to control Chemical and Volume Control System

letdown flow rate.

Test Requirements: TWV-3410 ·

Basis for Relief: Testing these valves during plant operation would

cause an unbalanced flow condition in the Chemical and Volume Control System. This could interrupt flow to the Reactor Coolant Pump Controlled Leakage Seal System, which could result in damage to the Reactor Coolant pumps; thereby, placing the plant

in an unsafe mode of operation.

Alternate Testing: These valves will be tested during cold shutdowns.

2. Valve: CV-4-204

Category: A Class: 2

Function: Provides the letdown flow path during plant operation.

Test Requirement: IWV-3410

Basis for Relief: Testing this valve during plant operation would

cause an unbalanced flow condition in the Chemical and Volume Control System. This would interrupt flow to the Reactor Coolant Pump Controlled Leakage Seal System. This could result in damage to the Reactor Coolant pumps; thereby, placing the plant in an unsafe mode of operation. The loss of the letdown flow path will result in the loss of the regenerative heat exchanger function. This could subject the

Reactor Coolant System piping to thermal shock due to cooler charging return flow from the Chemical and

Volume Control System.

SYSTEM: Chemical and Volume Control

3. Valve:

MOV-4-381

Category: A

2 Class:

Function: Provides the Reactor Coolant Pump seal injection return flow path to the Chemical and Volume Control System Volume Control Tank. In addition, provides the excess letdown flow path from the Reactor Coolant System to the Chemical and Volume Control System Volume Control Tank.

Test Requirement:

Pasis for Relief:

Testing this valve during plant operation would interrupt flow to the Reactor Coolant Pump Controlled Leakage Seal System, which could result in damage to the Reactor Coolant pumps; thereby, placing the plant in an unsafe mode of operation.

Alternate Testing: This valve will be tested during cold shutdowns.

4. Valve:

4-297A, 4-297B, and 4-297C

IWV-3410

Category: A Class:

Function: Provides the seal injection supply flow path to associated Reactor Coolant gump. Each valve is manually adjusted to ensure proper seal injection flow rate to the associated Reactor Coolant pump.

Test Requirement:

INV-3410

Pasis for Relief:

Testing these valves during plant operation would interrupt flow to the Reactor Coolant Pump Controlled Leakage Seal System, which could result in damage to the Reactor Coolant pumps; thereby, placing the plant in an unsafe mode of operation.

Alternate Testing:

These valves will be tested during cold shutdowns.

	•	FLORIDA POWER & LIGHT COMPANY					
	*		,				
РИМР	PUMP NO.	TEST PARAMETERS					
•		Speed,	Inlet	Differential		Vibration	Bearing
·.		и	Pressure, Pi	Prossure, AP	Rate, Q	Amplitude, V	Temperature, T <sub>b</sub> (1)
Auxillary Feed .	P2A ,	Yes	Yes	· Yes	Yes <sup>(3)</sup>	Yes	Yes
	P2B	Yes	Yes	Yes	Yes (3)	Yes	Yes
	P2C ·	Yes	Yes	Yes · ·	Yes <sup>(3)</sup>	Yes	Yes
Intake Cooling	4-P9A	No	Yes	Yes	Yes <sup>(3)</sup>	Yes	NO
Water	4-P9B	Ио	Yes' .	Yes	Ye\$(3)	Yes	110
·	4-P9C	Ио	·Yes	Yes .	Yes	Yes	но
Residual Heat	4-P210A	No.	Yes .	Yes	No (2)	. Yes	llo .
Removal ·	4-P210B	Ю	Yes .	Yes	No (2)	Yes	Мо
Component Cooling	4-P211A	Но	Yes	Yes	Yes (3)	· Yes	Yes
	4-P211B	Ио	Yes	Yes	Yes (3)	Yes	Yes
	4-P211C	No	Yes	, Yes	· Yes	Yes	Yes
Containment Spray	4-P214A	No	Yes	Yes	No (2)	Yes	Хea
	4-P214B	No	Yes.	Yes	No <sup>(2)</sup>	Yes	Yes
			·			,	
	•	·					
PUNP TEST P	ROGRAM	:		•		TABLE TV	

PUMP TEST PROGRAM .

TABLE IV

			FLORIDA PO	OWER & LIGHT COM	PANY	•	
							•
, PUMP	PUMP NO.	<u>.</u>		TEST PA	RAMETE		
•		Speed,	Inlet Pressure,	Differential Pressure,		Vibration Amplitude,	Bearing Temperature,
		и	· Pi	ΔP	Ω	V	T <sub>b</sub> (1)
					No <sup>(2)</sup>	Yes	Vog
lligh llead Safety Injection	P215A	OM	Yes	·· Yes	}		Yes .
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PUMP TEST PROGRAM TABLE IV							
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# ATTACHMENT B-1

Re: Turkey Point Unit 4

Docket No. 50-251

Revised Pump and Valve Test Program

BASES FOR RELIEF REQUESTS.

SYSTEM: Chemical and Volume Control

1. Valve: CV-4-200A, CV-4-200B, and CV-4-200C

Category: A Class: 1

Function: Provides parallel letdown flow paths through the letdown

orifices to control Chemical and Volume Control System

letdown flow rate.

Test Requirements: IWV-3410 ·

Basis for Relief: Testing these valves during plant operation would

cause an unbalanced flow condition in the Chemical and Volume Control System. This could interrupt flow to the Reactor Coolant Pump Controlled Leakage Seal System, which could result in damage to the Reactor Coolant pumps; thereby, placing the plant

in an unsafe mode of operation.

Alternate Testing: These valves will be tested during cold shutdowns.

2. Valve: CV-4-204

Category: A Class: 2

Function: Provides the letdown flow path during plant operation.

Test Requirement: IWV-3410

Basis for Relief: Testing this valve during plant operation would

cause an unbalanced flow condition in the Chemical and Volume Control System. This would interrupt flow to the Reactor Coolant Pump Controlled Leakage Seal System. This could result in damage to the Reactor Coolant pumps; thereby, placing the plant in an unsafe mode of operation. The loss of the letdown

flow path will result in the loss of the regenerative heat exchanger function. This could subject the Reactor Coolant System piping to thermal shock due to cooler charging return flow from the Chemical and

Volume Control System.

SYSTEM: Chemical and Volume Control

3. Valve: MOV-4-381

Category: A Class: 2

Function: Provides the Reactor Coolant Pump seal injection return

flow path to the Chemical and Volume Control System
Volume Control Tank. In addition, provides the excess
letdown flow path from the Reactor Coolant System to the
Chemical and Volume Control System Volume Control Tank.

Test Requirement: IWV-3410

Basis for Relief: Testing this valve during plant operation would

interrupt flow to the Reactor Coolant Pump Controlled Leakage Seal System, which could result in damage to the Reactor Coolant pumps; thereby, placing the plant in an unsafe mode of operation.

Alternate Testing: This valve will be tested during cold shutdowns.

4. Valve: 4-297A, 4-297B, and 4-297C

Category: A Class: 2

Function: Provides the seal injection supply flow path to associated

Reactor Coolant pump. Each valve is manually adjusted to ensure proper seal injection flow rate to the associated

Reactor Coolant pump.

Test Requirement: IWV-3410

Basis for Relief: Testing these valves during plant operation would

interrupt flow to the Reactor Coolant Pump Controlled Leakage Seal System, which could result in damage to the Reactor Coolant pumps; thereby, placing the plant

in an unsafe mode of operation.

SYSTEM: Chemical and Volume Control

5. Valve: HCV-4-121

Category: A Class: 2

Function: Provides the charging flow path to the Reactor Coolant

System. This valve is used to proportion flow between the seal injection supply to the Reactor Coolant Pump Controlled Leakage Seal System and the charging flow to

the Reactor Coolant System.

Test Requirement: IWV-3410

Basis for Relief: Testing this valve during plant operation would

cause and unbalanced flow condition in the Chemical and Volume Control System. This could interrupt flow to the Reactor Coolant Pump Controlled Leakage Seal System, which could result in damage to the Reactor Coolant pumps; thereby, placing the plant

in an unsafe mode of operation.

Alternate Testing: This valve will be tested during cold shutdowns.

6. Valve: CV-4-310A and CV-4-310B

Category: B Class: 1

Function: Provides redundant charging flow paths to the Reactor

Coolant System.

Test Requirement: IWV-3410

Basis for Relief: Testing these valves during plant operation would

cause an unbalanced flow condition in the Chemical and Volume Control System. This could interrupt flow to the Reactor Coolant Pump Controlled Leakage Seal System, which could result in damage to the Reactor Coolant pumps; thereby, placing the plant

in an unsafe mode of operation.

SYSTEM: Chemical and Volume Control

7. Valve:

LCV-4-115C

Category: B Class:

Function: Provides the flow path from the Volume Control Tank to the

charging pump suction header.

Test Requirement:

IWV-3410

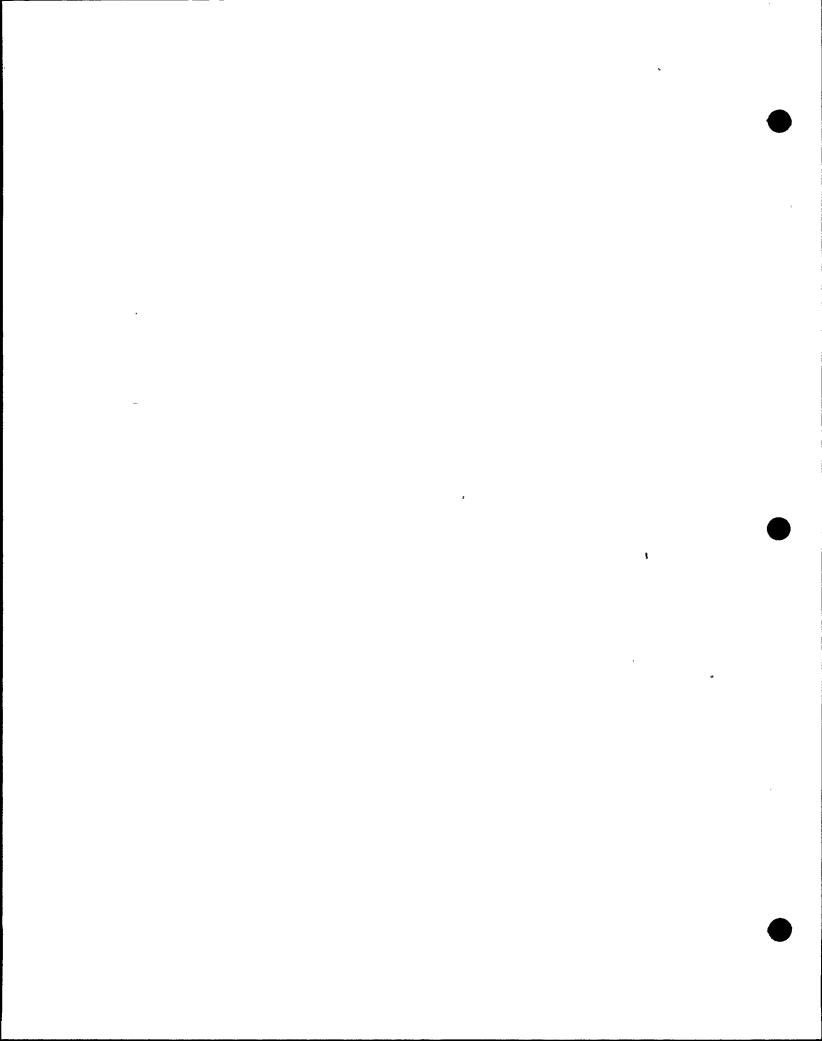
Basis for Relief:

Testing this valve during plant operation would cause an unbalanced flow condition in the Chemical and Volume Control System. This would interrupt flow to the Reactor Coolant Pump Controlled Leakage Seal System, which could result in damage to the Reactor pumps; thereby, placing the plant in an unsafe mode of operation. Further, the failure of this valve in the closed position, by testing during plant operation,

would isolate normal charging pump make-up.

Alternate Testing:

This valve will be tested during cold shutdowns.



Chemical and Volume Control SYSTEM:

LCV-4-115B 8. Valve:

> Category: B 2 Class:

Function: Provides a flow path from the refueling water storage tank

to the Reactor Coolant System.

Test Requirement: IWV-3410

Testing this valve during plant operation would Basis for Relief:

result in the addition of Boron to the Reactor Coolant System. This could place the plant in an

unsafe mode of operation.

Alternate Testing: This valve will be tested during cold shutdowns.

9. Valve: MOV-4-350

> Category: B Class:

Function: Provides a flow path from the Boric Acid Storage Tanks to

the Reactor Coolant System.

Test Requirement: IWV-3410

Basis for Relief:

Testing this valve during plant operation would result in the addition of Boron to the Reactor Coolant System. This could place the plant in an

unsafe mode of operation.

SYSTEM: Chemical and Volume Control

10. Valve: 4-312A and 4-312B

Category: C Class: 1

Function: Prevents reverse flow from the Reactor Coolant System to

the Chemical and Volume Control System charging flow path.

Test Requirements: IWV-3520

Basis for Relief: Testing these valves during plant operation would

cause an unbalanced flow condition in the Chemical and Volume Control System. This could interrupt flow to the Reactor Coolant Pump Controlled Leakage Seal System, which could result in damage to the Reactor Coolant pumps; thereby, placing the plant in

an unsafe mode of operation.

Alternate Testing: These valves will be tested during cold shutdowns.

11. Valve: 4-351 Category: C

Class: 2

Function: Prevents reverse flow from the charging pump suction header

to the Boron Addition System.

Test Requirements: IWV-3520

Pasis for Relief: Testing this valve during plant operation would.

result in the addition of Boron to the Reactor Coolant System. This could place the plant in an

unsafe mode of operation.

Chemical and Volume Control SYSTEM:

12. Valve:

4-357

Category: C

Class:

Function: Prevents reverse flow from the charging pump suction

header to the Refueling Water Storage Tank system.

Test Requirement:

IWV-3520

Basis for Relief:

Testing this valve during plant operation would result in the addition of Boron to the Reactor Coolant System. This could place the plant in an

unsafe mode of operation.

Alternate Testing:

This valve will be tested during cold

shutdowns.

13. Valve:

4-298A, 4-298B, and 4-298C

Category: AC Class:

Function: Prevents reverse flow from the Reactor Coolant Pump Seal

Injection System to the Chemical and Volume Control System.

Test Requirement:

IWV-3520

Basis for Relief:

Testing these valves during plant operation would interrupt flow to the Reactor Coolant Pump Controlled Leakage Seal System, which could result in damage to the Reactor Coolant pumps; thereby, placing the plant

in an unsafe mode of operation.

Further, the testing of these valves during cold shutdowns is impractical since it would require draining the Reactor Coolant Pump Seal Injection System to check the position of these valves. This would increase the possibility of causing damage to the Reactor Coolant pump seals due to the added frequency

of venting the system prior to plant operation.

SYSTEM: Chemical and Volume Control

14. Valve: 4-312C

Category: AC Class: 1

Function: Prevents reverse flow from the Reactor Coolant System

charging flow path to the Chemical and Volume Control System.

Test Requirement: TWV-3520

Basis for Relief: Testing this valve during plant operation would cause

an unbalanced flow condition in the Chemical and Volume Control System. This could interrupt flow to the Reactor Coolant Pump Controlled Leakage Seal System, which could result in damage to the Reactor Coolant pumps; thereby, placing the plant in an unsafe mode

of operation.

Testing this valve during cold shutdown is impractical because it would require draining the charging system to check the position of the valve. This would cause a loss of the charging flow path that is routinely used to meet the Tech Spec requirements to have a Boron injection flow path to the Reactor Coolant

System during cold shutdown.

SYSTEM: Safety Injection

1. Valve: MOV-4-860A and MOV-4-860B

Category: B Class: 2

Function: Provides the flow path from train "A" and train "B"

containment recirculation sumps to the suction of the Residual Heat Removal pumps "A" and "B" respectively,

during the recirculation phase following a LOCA.

Test Requirement: IWV-3410

Basis for Relief: In the event that maintenance is required upon

the failure of either of these valves, by testing during plant operation, it would cause a loss of

containment integrity.

Alternate Testing: These valves will be tested during cold shutdowns.

2. Valve: MOV-4-861A and MOV-4-861B

Category: A Class: 2

Function: Provides the flow path from train "A" and train "B"

containment recirculation sumps to the suction of the Residual Heat Removal pumps "A" and "B" respectively,

during the recirculation phase following a LOCA.

Test Requirement: IWV-3410

Basis for Relief: The failure of either of these valves in the open

position, by testing during plant operation, would

cause a loss of containment integrity.

SYSTEM: Safety Injection

3. Valve: MOV-4-863A and MOV-4-863B

Category: B Class: 2

Function: Provides the flow path to the alternate header to the

Reactor Coolant System from the Low Pressure Safety Injection System. Also, provides the flow path to the High Pressure

Safety Injection System during the recirculation mode.

Test Requirement: IWV-3410

Basis for Relief: The failure of either of these valves in the open

position, by testing during plant operation, would result in diverting flow from the reactor core in the

event of a safety injection signal.

Alternate Testing: These valves will be tested during cold shutdowns.

4. Valve: MOV-4-872

Category: B Class: 2

Function: Provides the alternate flow path from the Low Pressure Safety

Injection System to the Reactor Coolant System.

Test Requirement: IWV-3410

Basis for Relief: The failure of this valve in the open position, by

testing during plant operation would result in diverting flow during the High Pressure Recirculation mode.

Safety Injection SYSTEM:

5. Valve:

CV-4-855

Category: Class:

Α

Function: Provides the Nitrogen supply to maintain pressure in the

Safety Injection Accumulators.

Test Requirement:

\*\* :-IWV-3410

Basis for Relief:

The failure of this valve in the closed position,

by testing during plant operation, would cause a loss of Nitrogen make-up to the accumulators to maintain the pressure above Tech Spec limits.

Alternate Testing: This valve will be tested during cold shutdowns.

6. Valve:

MOV-4-866A and MOV-4-866B

Category: BE Class:

Function: Provides High Pressure Safety Injection redundant flow paths

to the Reactor Coolant System Hot Legs.

Test Requirement:

IWV-3410

Basis for Relief:

These valves are required by Tech Specs to be closed and locked-out at the breaker during plant operation. The testing of these valves during plant operation, coupled with the failure of Valve 4-874A or 4-874B, could subject the Safety Injection System

to pressures in excess of its design pressure.

SYSTEM: Safety Injection

7. Valve: 4-876A, 4-876B, and 4-876C

Category: C Class: 1

Function: Prevents reverse flow from the Accumulator Safety Injection

· System and the High Pressure Safety Injection System to the

Low Pressure Safety Injection System.

Test Requirement: IWV-3520

Basis for Relief: These valves cannot be tested during operation

because the Low Pressure Safety Injection pumps

do not develop sufficient discharge head to establish

a flow path to the Reactor Coolant System.

Alternate Testing: These valves will be tested during cold shutdowns.

8. Valve: 4-876D and 4-876E

Category: C Class: 1

Function: Prevents reverse flow from the Accumulator Safety Injection

System and the High Pressure Safety Injection System to the Low Pressure Safety Injection System alternate flow path.

Test Requirement: IWV-3520

Basis for Relief: These valves cannot be tested during plant operation

because the Low Pressure Safety Injection pumps do not develop sufficient discharge head to establish a

flow path to the Reactor Coolant System.

SYSTEM: Safety Injection

9. Valve: 4-875A, 4-875B, 4-875C

Category: C Class: 1

Function: Prevents reverse flow from the Reactor Coolant System to

the Accumulator Safety Injection System, Low Pressure Safety

Injection System, and High Pressure Safety Injection System.

Test Requirement: IWV-3520

Basis for Relief: These valves cannot be tested during plant operation

because the High Pressure Safety Injection or Low Pressure Safety Injection pumps do not develop sufficient discharge head to establish a flow path

to the Reactor Coolant System.

Alternate Testing: These valves will be tested during cold shutdowns.

10. Valves: MOV-878A and MOV-878B

Category: B Class: 2

Function: Provides a flow path for any combination of two of the

four High Pressure Safety Injection pumps to the Reactor

Coolant System of either unit.

Test Requirement: IWV-3410

Basis for Relief: In the event that maintenance is required upon

the failure of either of these valves, by testing during plant operation of both units, it would jeopardize the ability of the High Pressure Safety Injection pumps to support a LCCA; thereby, placing

the units in an unsafe mode of operation.

In the event that maintenance is required upon the failure of either of these valves, by testing during cold shutdown of either unit, it would jeopardize the ability of the High Pressure Safety Injection pumps to support a LOCA on the operating unit; thereby, placing that unit in an unsafe mode of operation.

SYSTEM: Safety Injection

11. Valve: MOV-4-864A and MCV-4-864B

Category: BE Class: 2

Function: Provides the flow path to the High Pressure Safety Injection,

Low Pressure Safety Injection, and Containment Spray pumps.

Test Requirement: IWV-3410

Basis for Relief: These valves are required by Tech Specs to be open and locked-out at the breaker during plant operation.

The failure of either of these valves in the closed position, by testing during plant operation, would cause a total loss of the Containment Spray and the Low Pressure Safety Injection Systems and, further, jeopardize the High Pressure Safety Injection System; thereby, placing the plant in an unsafe mode of

operation.

The failure of either of these valves in the closed position, by testing during cold shutdown, would jecpardize the High Pressure Safety Injection System and cause a loss of an emergency flow path to the Boration Systems; thereby, placing the plant in an

unsafe mode of operation.

Alternate Testing: These valves will be tested during refueling

shutdowns.

SYSTEM: Safety Injection

12. Valve: MOV-4-862A and MOV-4-862B

Category: BE Class: 2

Function: Provides a flow path to the Low Pressure Safety Injection

System.

Test Requirement: IWV-3410

Basis for Relief: These valves are required by Tech Specs to be open

and locked-out at the breaker during plant operation. The failure of either of these valves in the closed position, by testing during plant operation, would cause a total loss of the Low Pressure Safety Injec-

tion System.

In the event that maintenance is required upon the failure of Valve 862A, by testing during cold shutdown, it would cause a loss of the RWST and jeopardize the ability of the High Pressure Safety Injection Pumps to support a LOCA on the operating unit. In the event that maintenance is required upon the failure of Valve 862B, by testing during cold shutdown, it would

cause a loss of the ability to cool the core.

Alternate Testing: These valves will be tested during refueling shutdowns.

13. Valve: SV-4-2905, SV-4-2906, SV-4-2907, SV-4-2908, SV-4-2909, and

SV-4-2910

Category: B
Class: 2

Function: Provides the flow path from the operating Containment Spray

header(s) to the Emergency Containment Filters (redundant pairs).

Test Requirement: IWV-3410

Basis for Relief: These valves are solenoid operated (pilot actuated)

and require pressure in the line to be operated.

Functional testing by placing this system in operation would result in dousing the filters and containment.

Testing of these valves by connecting an external

water source would also douse the filters.

SYSTEM: Safety Injection

14. Valve: 4-2918, 4-2919, 4-2920, 4-2921, 4-2922, and 4-2923

Category: C Class: 2

Function: Prevents reverse flow from one Containment Spray Header to the

other header.

Test Requirement: ' IWV-3520

Basis for Relief: Testing of these valves, by placing this system

in operation or by connecting an external water source,

would result in dousing the containment and the Emergency Containment Filters' charcoal filters.

Alternate Testing: These valves will be dissassembled, on an alternating

basis, during refueling shutdowns over the ten year Inservice Inspection Interval to inspect the valves' internals and to physically verify the valves' freedom

of motion to the open and closed positions. Any problems found during this inspection would be cause

for inspecting the remaining valves.

15. Valve: 4-874A and 4-874B

Category: C Class: 1

Function: Prevents reverse flow from the Reactor Coolant System Hot Legs

to the High Pressure Safety Inspection System.

Test Requirement: TWV-3520

Basis for Relief: These valves cannot be tested during plant operation

because the High Pressure Safety Inspection pumps do not develop sufficient discharge head to establish a

flow path to the Reactor Coolant System.

Further, testing of these valves during cold shutdowns

is impractical since it could subject the Reactor

Coolant System to conditions exceeding Pressure-Tempera-

ture limits.

SYSTEM: Safety Injection

16. Valve: 4-873A, 4-873B, and 4-873C

Category: C Class: 1

Function: Prevents reverse flow from the Accumulator Safety Injection

System and the Low Pressure Safety Injection System to the

High Pressure Safety Injection System.

Test Requirement: IWV-3520

Basis for Relief: These valves cannot be tested during plant operation

because the High Pressure Safety Injection pumps do not develop sufficient discharge head to establish

a flow path to the Reactor Coolant System.

Further, testing of these valves during cold shut-

downs is impractical since it could subject the

Reactor Coolant System to conditions exceeding Pressure-

Temperature limits.

Alternate Testing: These valves will be tested during refueling shutdowns.

17. Valve: 4-875D, 4-875E, and 4-875F

Category: C Class: 1

Function: Prevents reverse flow from the High Pressure Safety Injection

System and the Low Pressure Safety Injection System to the

Accumulator Safety Injection System.

Test Requirement: IWV-3520

Basis for Relief: These valves cannot be tested during plant operation

because the accumulator pressure is insufficient to provide the differential pressure required to establish

a flow path to the Reactor Coolant System.

Further, testing of these valves during cold shutdowns

is impractical since it could subject the Reactor

Coolant System to conditions exceeding Pressure-Tempera-

ture limits.

SYSTEM: Safety Injection

18. Valve: 4-890A and 4-890B

Category: C Class: 2

Function: Prevents reverse flow from a non-operating Containment Spray

Header to the Containment Spray pump suction header.

Test Requirement: IWV-3520

Basis for Rélief: Testing of these valves, by placing this system in

operation, would result in dousing the Containment.

Alternate Testing: These valves will be dissassembled, on an alternating

basis, during refueling shutdowns over the ten year Inservice Inspection Interval to inspect the valves' internals and to physically verify the valves' freedom

of motion to the open and closed positions. Any problems found during this inspection would be cause

for inspecting the other valves.

SYSTEM: Auxiliary Coolant, Component Cooling Water

l. Valve:

CV-4-739

Category: B Class: 2

Function: Provides the component cooling water return flow path for

the excess letdown heat exchanger.

Test Requirement:

IWV-3410

Basis for Relief:

The failure of this valve in the closed position,

by testing during plant operation, would cause a loss of the Excess Letdown Heat Exchanger System function.

Alternate Testing:

This valve will be tested during cold shutdowns.

2. Valve:

4-738

Category:

C

Class:

2

Function: Prevents reverse flow from the excess letdown heat exchanger,

shell side, to the component cooling water supply header.

Test Requirement:

IWV-3520

Basis for Relief:

The failure of this valve in the closed position, by

testing during plant operation, would cause a loss of

Excess Letdown Heat Exchanger System function.

Alternate Testing:

This valve will be tested during cold shutdowns.

SYSTEM: Auxiliary Coolant, Component Cooling Water

3. Valve: MOV-4-716A

Category: B Class: 3

Function: Provides the component cooling water supply flow path for

the heat exchangers located in the Reactor Coolant pumps

(motors and thermal barriers).

Test Requirement: IWV-3410

Basis for Relief: Testing this valve during plant operation would

cause interruption of cooling water to the Reactor Coolant pumps' heat exchangers. This action could result in damage to the Reactor Coolant pumps; thereby,

placing the plant in an unsafe mode of operation.

Alternate Testing: This valve will be tested during cold shutdowns.

4. Valve: MOV-4-716B

Category: B Class: 2

Function: Provides the component cooling water supply flow path for the

heat exchangers located in the Reactor Coolant pumps (motors

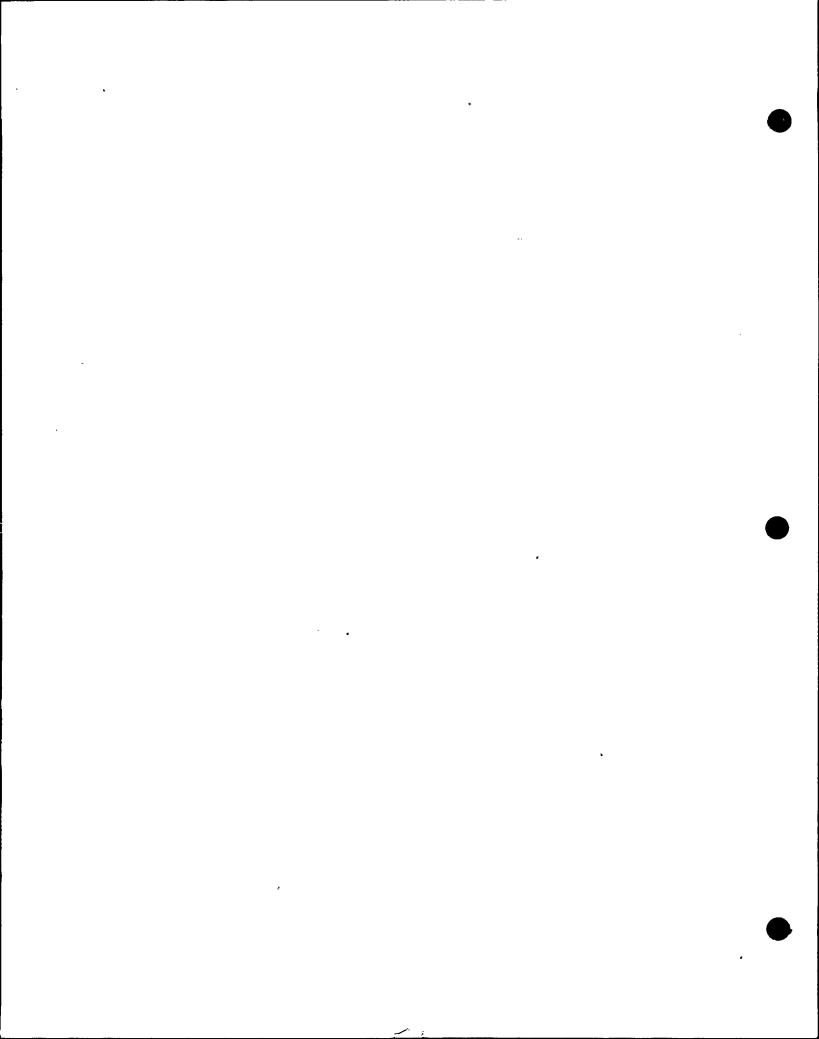
and thermal barriers).

Test Requirement: IWV-3410

Basis for Relief: Testing this valve during plant operation would cause

interruption of cooling water to the Reactor Coolant pumps' heat exchangers. This action could result in damage to the Reactor Coolant pumps; thereby, placing

the plant in an unsafe mode of operation.



Auxiliary Coolant, Component Cooling Water SYSTEM:

5. Valve:

MOV-4-730

Category: B 2 Class:

Function: Provides the component cooling water return flow path

for the Reactor Coolant pumps' motor heat exchangers.

Test Requirement:

IWV-3410

Testing this valve during plant operation would Basis for Relief:

cause interruption of cooling water to the Reactor Coolant pumps' motor heat exchangers. This action could result in damage to the Reactor Coolant pumps;

thereby, placing the plant in an unsafe mode of

operation.

Alternate Testing: This valve will be tested during cold shutdowns.

FCV-4-626 · 6. Valve:

> Category: B Class:

Provides the component cooling return flow path for the

Reactor Coolant Pumps' Controlled Leakage Seal System

thermal barriers.

Test Requirement: TWV-3410

Testing this valve during plant operation would Basis for Relief:

cause interruption of cooling water to the Reactor Coolant Pumps' Controlled Leakage Seal System heat exchangers. This action could result in damage to the Reactor Coolant pumps; thereby, placing the plant

in an unsafe mode of operation.

This valve will be tested during cold shutdowns. Alternate Testing:

SYSTEM: Reactor Coolant

1. Valve: CV-4-519A

Category: A Class: 2

Function: Provides a primary water flow path to either the pressurizer

relief tank or the Reactor Coolant pumps' standpipes.

Test Requirement: IWV-3410

Basis for Relief: Failure of this valve in the open position, by

testing during plant operation, would cause a loss

of containment integrity.

Alternate Testing: This valve will be tested during cold shutdowns.

2. Valve 4-518

Category: AC Class: 2

Function: Prevents reverse flow from the Pressurizer Relief Tank to

the Nitrogen system.

Test Requirement: IWV-3520

Basis for Relief: Failure of this valve in the open position, by

testing during plant operation, would cause a loss

of containment integrity.

SYSTEM: Sampling

1. Valve: CV-4-956A, CV-4-956B, CV-4-956C, and CV-4-956D

Category: A Class: 2

Function: Provides the flow path from the pressurizer steam space,

the pressurizer liquid space, the Reactor Coolant System, and the accumulators respectively, to the Sample System.

Test Requirement: IWV-3410

Basis for Relief: The failure of any one of these valves in the

open position, by testing during plant operation,

would cause a loss of containment integrity.

SYSTEM: Auxiliary Coolant, Residual Heat Removal

1. Valve: MOV-4-744A and MOV-4-744B

Category: B Class: 2

Function: Provides a flow path from the Low Pressure Safety Injection

System to the Reactor Coolant System.

Test Requirement: IWV-3410

Basis for Relief: The testing of these valves during plant operation,

coupled with the failure of Valves 4-876A, 4-876B, or 4-876C, could subject the Low Pressure Safety Injection System to pressures in excess of its design pressure.

Alternate Testing: These valves will be tested during cold shutdowns.

2. Valve: MOV-4-751

Category: A Class: 1

Function: Provides the flow path from the Reactor Coolant System to the

Residual Heat Removal System.

Test Requirement: IWV-3410

Basis for Relief: This valve cannot be tested during plant operation.

The valve is interlocked to prevent it from opening when the Reactor Coolant System pressure exceeds a set

point of 465 psig.

Failure of this valve in the closed position, by testing

during cold shutdowns, would cause a loss of system function (ability to cool the core with the Residual

Heat Removal System).

SYSTEM: Auxiliary Coolant, Residual Heat Removal

3. Valve: MOV-4-750

Category: B Class: 1 '

Function: Provides the flow path from the Reactor Coolant System to

the Residual Heat Removal System.

Test Requirement: IWV-3410

Basis for Relief: This valve cannot be tested during plant operation.

The valve is interlocked to prevent it from opening when the Reactor Coolant System pressure exceeds a

set point of 465 psig.

Failure of this valve in the closed position, by testing during cold shutdowns, would cause a loss of system function (ability to cool the core with the

Residual Heat Removal System).

Alternate Testing: This valve will be tested during refueling

shutdowns.

SYSTEM: Main Steam

1. Valve: POV-4-2604, POV-4-2605, POV-4-2606

Category: C Class: 2

Function: Provides the flow path from the associated steam

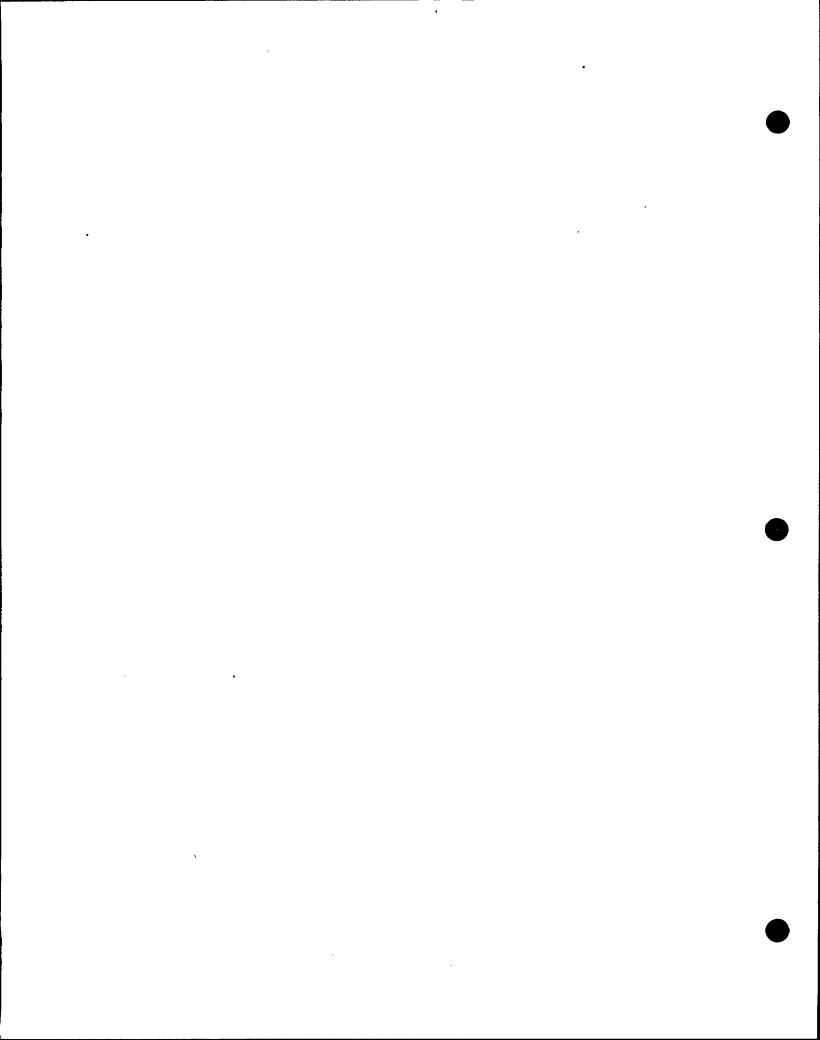
generator to the main steam line header.

Test Requirement: IWV-3520

· Basis for Relief: Testing any one of these valves during plant

operation would isolate the associated steam generator from the main steam line header which

would result in a reactor trip.



SYSTEM: Condensate and Feedwater

1. Valve: MOV-4-1425, MOV-4-1426, and MOV-4-1427

Category: B Class: 2

Function: Provides the flow path from the associated steam generator

secondary side to the Sampling System.

Test Requirement: IWV-3410

Basis for Relief: The failure of any one of these valves in the closed

position, by testing during plant operation, would result in a loss of ability to sample the associated steam generator; thereby, affecting the ability to

verify proper chemistry control and to detect

radioactivity.

Alternate Testing: These valves will be tested during cold shutdowns.

2. Valve: MOV-4-1410, MOV-4-1411, and MCV-4-1412

Category: B Class: 2

Function: Provides the flow path from the associated steam generator

secondary side to the Blowdown system.

Test Requirement: IWV-3410

Basis for Relief: The failure of any one of these valves in the closed

position, by testing during plant operation, would result in a loss of ability to blowdown the associated steam generator; thereby, affecting the ability to

maintain proper chemistry control

SYSTEM: Condensate and Feedwater

3. Valve: CV-4-2900, CV-4-2901, and CV-4-2902

Category: C Class: 2

Function: Prevents reverse flow from the associated steam generator to

the Feedwater System.

Test Requirement: : IWV-3520

Basis for Relief: Testing any one of these valves, during plant

operation, would cause an interruption of feedwater flow to the associated steam generator; thereby, placing the plant in an unsafe mode of operation.

SYSTEM: Service Air(Lube Oil, Service and Instrument Air)

1. Valve: 4-40-204

Category: AE Class: 2

Function: Provides the flow path from the Service Air System to

the containment.

Test Requirement: IWV-3410

Basis for Relief: The failure of this valve in the open position,

by testing during plant operation, would cause

a loss of containment integrity.

Alternate Testing: This valve will be tested during cold shutdowns.

2. Valve: 4-40-205

Category: AC Class: 2

Function: Prevents reverse flow from the containment atmosphere to

the Service Air System located outside containment.

Test Requirement: IWV-3520

Basis for Relief: The failure of this valve in the open position,

by testing during plant operation, would cause a

loss of containment integrity.

SYSTEM: Service Air (Lube Oil, Service and Instrument Air)

3. Valve: 4-40-203

Category: BE

Class: 2

Function: Provides the flow path from the Service Air System to

the containment (valve in series with 4-40-204).

Test Requirement: IVW-3410

Basis for Relief: This valve is required to be tested only to

provide the necessary flow path to valve 4-40-204

and will be tested during cold shutdowns (See

4-40-204 RRB No. 1).

SYSTEM: Instrument Air (Lube Oil, Service and Instrument Air)

4. Valve: 4-40-336

Category: AC Class: 2

Function: Prevents reverse flow from the Instrument Air System,

inside containment, to the Instrument Air System,

located outside containment.

Test Requirement: IWV-3520

Basis for Relief: Testing this valve during plant operation would

interrupt the instrument air supply to the components located inside containment that require instrument air for proper operation; thereby, placing the plant in an unsafe mode of operation.

Testing this valve during cold shutdown would interrupt the instrument air supply to the components located inside containment that require instrument air to maintain the plant in a safe shutdown condition; thereby, placing the plant in

an unsafe mode of operation.

Alternate Testing: This valve will be tested during refueling

shutdowns.

SYSTEM: Primary Make-up and Containment Cooling Water

1. Valve: MOV-4-1417 and MOV-4-1418

Category: B Class: 2

Function: Provides the component cooling water supply (MOV-4-1417)

and return (MOV-4-1418) flow paths for the normal containment coolers, the control rod drive mechanism coolers, and

the primary shield cooling coils.

Test Requirement: IWV-3410

Basis for Relief: Testing these valves during plant operation would

cause interruption of cooling water to the normal containment coolers, the control rod drive mechanism coolers, and the primary shield cooling coils. This action could result in damage to the control rod drive mechanisms and associated equipment; thereby, placing the plant in an unsafe mode of operation.

SYSTEM: Containment Ventilation

1. Valve: HV-4-1 and HV-4-3

Category: E Class: 2

Function: Provides redundant flow paths for Post Loss of Coolant

Accident purge.

1 2

Test Requirement: IWV-3410

Basis for Relief: In the event that maintenance is required upon the

failure of either of these valves, by testing during plant operation, it would cause a loss of containment

integrity.

Alternate Testing: These valves will be tested during cold shutdowns.

2. Valve: HV-4-2 and HV-4-4

Category: AE Class: 2

Function: Provides redundant flow paths for Post Loss of Coolant

Accident purge.

Test Requirement: IWV-3410

Basis for Relief: The failure of either of these valves in the open

position, by testing during plant operation, would

cause a loss of containment integrity.

SYSTEM: Containment Ventilation

3. Valve:

4-11-003

Category: Class:

AC2

Function: Prevents reverse flow from the containment atmosphere to

the Containment Gas and Particulate Radioactivity Detection

System.

Test Requirement:

IWV-3520

Basis for Relief:

The Tech Specs require two independent systems to monitor reactor coolant leakage; one of which has to be sensitive to radioactivity. Testing this valve during plant operation would cause an interruption of the Reactor Coolant Leak Detection System which is sensitive to radioactivity.

Similarly, testing this valve during cold shutdown would result in an interruption of the Detection

System which is sensitive to radioactivity.

Alternate Testing:

This valve will be tested during refueling shut-

downs.

# ATTACHMENT C

Re: Turkey Point Unit 4
Docket No. 50-251

Revised Pump and Valve Test Program

This Attachment lists changes made in the Turkey Point Unit 4 Pump and Valve Test Program during the final review by FPL. The changes have not been discussed with the NRC staff, either through meetings or telephone conferences. The purpose of listing them here is to highlight any changes made by FPL subsequent to the May-June, 1978 discussions referenced in the cover letter.

# A. Valves Deleted From Program

Several valves determined to be non-safety related have been deleted from the Program (see attached pages from previous Program dated April 5, 1978).

# B. Valves Added to Program

1. The following valves were added because they receive an SIAS or CIS signal:

2. The following valve was added because it was inadvertently deleted during NRC-FPL review in May-June, 1978:

3. The following valves were added because they are locked open and in safety related flow paths:

# C. Recategorized Valves/Changed Testing Requirements

 The designation of the following valves has been changed from passive to active (exercise during cold shutdown):

```
HV-4-1
HV-4-2
HV-4-3 (Page 40 of 43)
HV-4-4
```

2. Valve 4-40-203 has been redesignated B/E. Valve 4-40-204 has been redesignated A/E. (Page 34 of 43) Valve 4-40-205 has been redesignated A/C.

3. The designation of the following valves has been changed from A to B:

4. The designation of the following valves has been changed from E to B (test during plant operation):

5. The following valves will be tested during cold shutdown instead of during refueling shutdown:

6. The designation of the following valve has been changed from A to A/E:

7. The designation of the following valves has been changed from B to B/E:

8. The designation of the following valves has been changed from passive to active (exercise during plant operation):

D. <u>Pumps Added to Program</u>

Add Unit 3 Safety Injection pumps (Table IV).

# FOR INFORMATION ONLY

PTP-A

<del></del>							•					<u> </u>
		<del>1</del>		·	FL	ORIDA	POWER	& LIGHT	COMP AN	ΙΥ		
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE CL.	CODE CAT:		NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	REMARKS
												VALVE Courtinates
<b>#</b> 332	2	HGATO	маи	3	E	P	ro	FAI	ио	1	oc-ı	B-9 ·
<b>*</b> 378	2	DIAPH	ИАМ	3	E,	P	ro	FAI	ио	1	∞-1	B-8
<b>* 379</b>	2	DIAPH	MAN	3	E	P	īO	FAI	ИО	1	OC-1	B-9 * Valves
<b>* 399</b>	2	DIAPH	MAN	3	E	P	LO.	FAI	No	1 .	oc-1	B-7 Deledel- Non-JAFETY
<del>%</del> 336	2	DIAPH	MAN	3	E	P	ıc	FAI	ио	1	oc-1	A'-9 RELATED
<b>* 337</b>	2	DIAPH	MAN	3	E	P	rc	FAI	ио -	1	oc-i.	A-9
<b>★</b> 394	2	DIAPH	ИАМ	3	E	P	rc	FAI	ИО	1	oc-1 "	A-7
<b>米395</b>	2	DIAPH	ИАМ	3	E	P	ic .	FAI -	МО	ı	oc-1	. A-7
<b>#</b> 329	3/4	DIÀPII	МАИ	3	E	P	ro	FAI	ио	1	oc-1	B-8
· 次344	3/4	DIAPH	нан	3	E	P	ro	FAI	ио	ı	∞-i	B-9
<b>★</b> 370	3/4	DIAPH	мии	3	E	P	EO.	FAI	ио	ı	oc-1	<b>3-7</b>
ж 4-232B	2	DIAPH	MAN	3	E	P	rc	FAI	ИО	ı	oc-1	c-8
米4-232C	2	DIAPH	иам	3	E	P	rc	FAI	ио	ı	oc-1	C-7
<b> ∦4-246</b>	2	DIAPH	ман	3	E .	Р.	ıc .	FAI	МО	1	oc-i	C-6
*				}	ł					Ì		
				}						-	-	
<del></del>									<u> </u>		,	
SYSTEM			_	13	HOGRAM			*				<b>4</b>

CHEM. VOL. CONT. (CVCS)

PHOGRAM

VALVE TEST PROGRAM

TABLE I TESTS TO CODE

Title F-503184

PTP-4

		<del></del>			FL	ORIDA	POWER 8	3. L.IGHT	COMPAN	Y	<del></del>	<u> </u>
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE CL.	CODE CAT.		NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	REMARKS .
RV-4-722A	3/4	SAFE	SA	3	c	A	NC .		МО	1	TF-1	
RV-4-722B	3/4	safe	SA	3	С	A	иС		Ю	1	TF-1.	
RV-4-722C ·	3/4	safe	SA	3	С	A	NC		ио	1	TF-1	
RV-4-1423 RV-4-1424	3/4	SAFE SAFE	SA	2	С	A	NC	. ,	NO	1	TF-1	
RV-4-1425	3/4	SAFE	SA	2 .	С	A	NC NC		МО	1 1	TF-1	
4-710A .	4	Gate	MAN	3	E	P	LO	FAI	ио	1	0C-1	
4-710B	4	GATE	ман	3.	E	P	ro	FAI	ИО	1	oc-1,	Value Coordinates
·米 4-835A	12	GATE	MAN	3	E .	P	LC	FAI	ио	1	0C-1 	T-11 Alves  Deleted -  Non-Safety
<b>※ 4-835B</b>	12	Gate	MAN	3	Е	P	ro .	FAI	ио	1	00-1	D-11
- <b>¾- 4-835</b> C -	12	GATE	МУИ	3	Е	P	LO	FAI	ИО	1	OC-1	A-11
DAME		). COOL.		ז	HOGRAM	VVTVI	e test	PROGRAM		APR 5	5 1978	TABLE I TESTS TO CODE

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	alve Umber	SIZE	TYPE	ACTU.	CODE CL.		ACT/ PAS	norm. Pos.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	REMARKS	·
- ••	4-835D 4-835E	12	GATE.	'MAN'	3	E	P	rc	FAI FAI	ио .	1	0C-1 0C-1	VALVE COOLDINATES A-11	* Values Deleted - Non-Sapery
	4-835F	12	GATE	MAN	з .	E	P	I.C.	FAI	ОИ	1	∞-1	A-7	il elated
<b>米</b>	4-835G	12	GATE	ИАМ	3	E	P	rc	FAI	ио	1	00-1	D-3	
<b>沙</b>	4-835H	12	GATE	иам	3	E	P	ro	FAI	ио	1	oc-1	D-3	
	4-770A	. 2	GATE	MAN	з ·	E	P	io	FAI	ио	1	00-1		
	4-770B	2	GATE	MAN	3	E	P	10	FAI	ИО	1	OC-1		
	4-770C ·	2	GATE	MAN	3	E	P	ro	FAI	ио	1	oc-1		
	4-770D	2	GATE	MAN	3	E	P	ro	FAI	ио	1	oc-1		•
•	4-787A	16	GATE	MAN	3	E	P	ro .	FAI	по	ı	oc-1	,	
¥	4-787B	16	GATE	иам	3	E	P	ro	FAI	NO -	1 '	oc-1	B-10	

#-503187, E-503188, F -502036

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TESTS TO CODE

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			·		1. F	ORIDA	POWER 8	LIGHT (	UMP AN		·	<del>,</del>	
VALVE NUMBER	SIZE	TYPE	ACTU.	CODE	CODE CAT:		NORM. POS.	FAIL- URE MODE	REM. POS. IND.	TEST PER.	ISI TESTS	REMARKS	
4-787C	16	GATE	MAN	3	E	P	ro	FAI	ИО	1.	oc-1	VALVE COOIZDIVATES	_
₹ 4-787D	16	GATE	MAN .	3	E.	p	ro	FAI	ИО	1	oc-1 <sub>.</sub>	B-15	X Valves Deletal - Non-Sneety
4-787E	16	GATE	MAN	3	E	P	ro	FAI	ИО	1	oc-1		RELATED
4-787F	16	GATE	MAN	3	E	P	ro	FAI	ио .	1	oc-1		
⊁: 4−787G	16	GATE	MAN	3	E	P	ro	FAI	ио	1	oc-1	C-15	•
<del>⅓</del> : 4-787H	16	GATE	МАМ	3.	E	P	ro	FAI	ио	1	oc-1	c-15	
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AUX. COOL. COMP. COOL. (ACCC) CHAMT TITLE F-503187, E-503188, F-502036

TABLE I TESTS TO CODE