

Tennessee Valley Authority, Post Office Box 2000, Spring City, Tennessee 37381-2000

February 22, 2011

U.S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, D.C. 20555-0001

> Watts Bar Nuclear Plant, Unit 2 NRC Docket No. 50-391

Subject:

Watts Bar Nuclear Plant (WBN) Unit 2 – Submittal of Pre-op Test

Instruction

The following approved WBN Unit 2 Pre-op Test Instruction (PTI) is enclosed:

PTI NUMBER	Rev.	TITLE
2-PTI-065-01	0	Emergency Gas Treatment System Logic Test

If you have any questions, please contact Pete Olson at (423) 365-3294.

Respectfully,

**David Stinson** 

Watts Bar Unit 2 Vice President

**Enclosure** 

cc (Enclosure):

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**1**030

# WATTS BAR NUCLEAR PLANT UNIT 2 PREOPERATIONAL TEST

### TITLE: EMERGENCY GAS TREATMENT SYSTEM LOGIC TEST

Instruction No: 2-PTI-065-01

Revision No: 0

Nevision No. <u>D</u>	•
PREPARED BY: Bethany B Merriman PARED BY: PRINT NAME / SIGNATURE  REVIEWED BY: Keith Jones PRINT NAME / SIGNATURE	DATE: 12-15-10
INSTRUCTION APPROVAL	
JTG MEETING No: 2-11-005	
JTG CHAIRMAN 2019	
APPROVED BY : PREOPERATIONAL STARTUP MANAGER	DATE: 477(1)
TEST RESULTS APPROVAL	
JTG MEETING No:	
JTG CHAIRMAN:	DATE:
APPROVED BY :	DATE:
PREOPERATIONAL STARTUP MANAGER	

SMP-8.0 R7 Administration of Preoperational Test instructions, Appendix B

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### **Revision Log**

Revision or Change Number	Effective Date	Affected Page Numbers	Description of Revision/Change
0	2/17/11	ALL	This procedure was written using the Unit 1 test procedure PTI-065-01 Rev 1 as a guide.

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#### 1.0 INTRODUCTION

#### 1.1 Test Objectives

The Emergency Gas Treatment System (EGTS) is provided for ventilation control and cleanup of the containment annulus atmosphere. To support that function, this instruction tests that the manual and automatic controls of the EGTS operate in accordance with design documents.

### 1.2 Scope

#### NOTE

All required air flows and pressure differentials will be tested in 2-PTI-065-02.

Demonstrate that the manual and automatic controls of the EGTS operate in accordance with design documents.

- A. Manual controls and indication for the required valves, dampers, and fans function in accordance with design requirements.
- B. All required dampers move to their design position upon a simulated low annulus differential pressure signal.
- C. All required dampers move to their design position upon their respective annulus vacuum fan start and stop signal.
- D. The annulus vacuum fans start upon a low flow signal from the opposite train fan.
- E. The annulus vacuum fans stop upon a simulated U2 Phase A (∅A) Containment Isolation Signal (CIS).
- F. All required valves and dampers move to their design position upon a simulated  $\emptyset A$  CIS.
- G. The EGTS fans start upon a simulated  $\emptyset A$  CIS.
- All required alarms are annunciated in the Main Control Room (MCR).

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#### 2.0 REFERENCES

#### 2.1 Performance References

- A. SMP-9.0, Conduct of Test
- B. GTM-05, HVAC Air Balance
- C. OPDP-7, Fuse Control

#### 2.2 Developmental References

- A. Final Safety Analysis Report, Amendment 102
  - 1. Section 6.2.3, Secondary Containment Functional Design
  - 2. Table 6.2.3.2, Failure Modes and Effects Analysis Emergency Gas Treatment System
  - 3. Table 14.2-1, Sheets 41/42, Secondary Containment Ventilation System Test Summary

#### B. Drawings

- 1. Flow Diagrams
  - a. 2-47W866-1, Rev 2, Heating and Ventilation Air Flow DRAs 53232-040, -041, -042, Rev 0 DRA 53809-053, Rev 0
- 2. Electrical Drawings
  - a. 1-45W760-65-1, Rev 12, Emergency Gas Treatment System Schematic Diagram
  - b. 2-45W760-65-2, Rev 1, Emergency Gas Treatment System Schematic Diagrams
     DRAs 53290-55, -71, Rev 1
  - 2-45W600-65-1, Rev 0, Emergency Gas Treatment System Schematic Diagram DRA 53534-64, Rev 0 DRA 52453-124, Rev 0

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### 2.2 Developmental References (continued)

- d. 2-45W600-65-2, Rev 0, Emergency Gas Treatment System Schematic Diagram
   DCAs 52641-02-61, -62, Rev 0
   DCAs 52641-03-57, -58, Rev 0
- e. 2-45W600-65-3, Rev 0, Emergency Gas Treatment System Schematic Diagram DRA 53534-65, Rev 0
- f. 2-45W600-57-5, Rev 1, Separation & Misc Aux Relays Schematic Diagrams DCA 52641-02-63, Rev 0 DCA 52641-03-59, Rev 0
- g. 2-45W600-57-22, Rev 1, Separation & Misc Aux Relays Schematic Diagrams DRA 52378-75, Rev 0
- 2-45W756-9, Rev 0, 480V Cont & Aux Bldg Vt Bd 2A1-A Single Line DRA 53534-60, Rev 0 DRA 53290-99, Rev 0
- 2-45W756-10, Rev 0, 480V Cont & Aux Bldg Vt Bd 2B1-B Single Line DRA 53534-61, Rev 0 DRA 53290-106, Rev 0
- j. 45W2770-4, Rev 9, 480V Cont & Aux Bldg Vent Bd 2A1-A Connection Diagram
- k. 45B2770-13C, Rev 6, 480V C&A Bldg Vt Bd 2A1-A Conn Diag -Compt 13C DRA 53290-17, Rev 1
- 45B2772-13C, Rev 8, 480V C&A Bldg Vt Bd 2B1-B Conn Diag -Compt 13C DRA 53290-39, Rev 1
- m. 45N2676-5, Rev 10, Solid State Protection Sys Train A Connection Diagram
- n. 45N2677-5, Rev 9, Solid State Protection Sys Train B Connection Diagram

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### 2.2 Developmental References (continued)

- o. 1-45B655-27B, Rev 5, Annunciator Inputs Window Box XA-55-27B DCA 52641-02-7, Rev 0 DCA 52641-03-20, Rev 0
- p. 1-45B655-E27B, Rev 1, Annunciator Window Box XA-55-27B
   Engraving
   DCA 52641-04-6, Rev 0
   DCA 52641-05-19, Rev 0
- q. 2-47A615-0, Rev 1, Integrated Computer System Terminations and I/O List
   DRA 52378-261, Rev 0
   DRAs 53534-48, -50, Rev 1
   DRA 53534-49, Rev 0
   DRAs 53809-21, -30, Rev 0
- r. 2-47B601-55-1, Electrical Instrument Tabulation, [Later] DRA 52453-04, Rev 0
- s. 2-47B601-55-2, Electrical Instrument Tabulation, [Later] DRA 52453-05, Rev 0
- t. 2-47B601-55-3, Electrical Instrument Tabulation, [Later] DRA 52453-06, Rev 0
- u. 2-47B601-55-4, Electrical Instrument Tabulation, [Later] DRA 52453-07, Rev 0

#### 3. Logic/Control Diagrams

a. 2-47W610-65-1, Rev 3, Control Diagram Emergency Gas Treatment System DRAs 53534-44, -45, -46, -47, -67, Rev 0

DRA 52378-473, Rev 0 DRA 53232-2, Rev 0 DRA 53809-101, Rev 0

 b. 2-47W610-65-1A, Rev 0, Control Diagram Emerg Gas Treatment System

DCAs 52641-02-1, -2, Rev 0

DCAs 52641-03-14, -15, Rev 0

DRAs 53232-3, -4, Rev 0

DRA 53809-13, Rev 1

DRAs 53809-14, -102, Rev 0

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### 2.2 Developmental References (continued)

- c. 2-47W611-65-1, Rev 2, Logic Diagram Emergency Gas Treatment System DRAs 52378-605, -635, Rev 0
- d. 2-47W611-65-2, Rev 1, Logic Diagram Emergency Gas Treatment System
- e. 2-47W611-65-3, Rev 0, Logic Diagram Emergency Gas Treatment System DCA 52641-02-3, Rev 0 DCA 52641-03-16, Rev 0

#### 4. Vendor Drawings

 a. 08F800063-RL-1201, Rev 3, Rack Loading Aux. Building Press.
 Controller & Emergency Gas Treatment System Panel 0-L-430 -Train A & B

#### C. Documents

- 1. WBN2-65-4001, Rev 2, System Description for Emergency Gas Treatment System
- 2. 2-TSD-65-1, Rev 0, Emergency Gas Treatment System
- 3. 2-TSD-88-5, Rev 1, Containment Isolation System
- 4. 2-PTI-065-02, Emergency Gas Treatment System Pressure Test [LATER]

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#### 3.0 PRECAUTIONS AND NOTES

- A. Standard precautions shall be followed for working around energized electrical equipment in accordance with TVA Safety Manual Procedure 1021.
- B. Steps may be repeated if all components cannot be tested in a step. However, if the test has been exited, prerequisite steps must be re-verified and a Chronological Test Log (CTL) entry made.
- C. Discrepancies between component ID tags and the description in a procedure/instruction if the UNIDs match, exclusive of place keeping zeros and train designators (e.g.; 2-HS-31-468 vs. 2-HS-031-0468) and the noun description is sufficient to identify the component. This condition does not require a TDN in accordance SMP-14.0. If the component label needs to be changed, a Tag Request Form (TR Card) should be processed in accordance with TI-12.14. Make an entry in the CTL and continue testing.
- D. All wires removed/lifted from a terminal shall be identified, grouped together, and taped or covered with an insulator to prevent personnel or equipment hazard and possible spurious initiations. The wires should be labeled with the work implementing document number that required them to be lifted if left unattended.
- E. All open problems are to be tracked by a corrective action document and entered on the appropriate system punchlist.
- F. Problems identified during the test shall be annotated on the CTL from SMP-9.0 including a description of the problem, the procedure step when/where the problem was identified, corrective action steps taken to resolve the problem, and the number of the corrective action document, if one was required.
- G. Observe all Radiation Protection requirements when working in or near contaminated areas.
- H. All terminal points and connections are to be considered energized.
   Instrumentation must be used to determine if the circuits are de-energized.
- I. Retermination of lifted leads requires the restored bend radius to be equal to or greater than the as found condition.
- J. During the performance of this procedure, visual observation of fans and ductwork is required. This includes steady-state and transient operations (fan starts and stops). Confirm by sight, sound, and touch, that vibration is NOT excessive.

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### 3.0 PRECAUTIONS AND NOTES (continued)

- K. If vibration is determined to be excessive, the Startup Test Engineer (STE) shall initiate a Test Deficiency Notice (TDN).
- L. Vibration testing of this system is performed during GTM-05.
- M. During the performance of this instruction, ensure no adverse impacts to the operation of Unit 1 systems, structures, or components.
- N. Fuse control shall be in accordance with OPDP-7. If multiple fuses will concurrently be in the uninstalled position, each fuse shall be bagged and tagged for identification immediately after removal from the circuit. If fuse(s) will be in the uninstalled position for more than one shift, each fuse shall be bagged, tagged, and locked in a secure location.

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	Data	a Package: Page of	Date
J.0	PRE	REQUISITE ACTIONS	
		NOTE	
comp		steps may be performed in any order unless otherwise stated as close in time as practicable to the start of the instruction subs	
l.1	Preli	iminary Actions	
	[1]	<b>VERIFY</b> the test/performance copy of this Preoperational Tellostruction (PTI) is the current revision including any change notices and as needed, each test person assisting in this test has the current revision including any change notices.	1
	[2]	OBTAIN copies of the applicable forms from the latest revis of SMP-9.0 AND  ATTACH to this PTI for use during the performance of this F	
	[3]	ENSURE changes to the references listed on Appendix A, Test Procedures/Instructions Reference Review, have been reviewed, and determined NOT to adversely affect the test performance.	
	[4]	VERIFY current revisions and change papers for referenced drawings have been reviewed and determined NOT to adversely affect the test performance, AND	
		ATTACH documentation of current drawing revision number and change papers that were reviewed to data package.	-s 
	[5]	<b>EVALUATE</b> open items in Watts Bar Integrated Task Equipment List (WITEL), <b>AND</b>	
		<b>ENSURE</b> that they will NOT adversely affect the test performance.	
	[6]	ENSURE required Component Testing has been completed	

prior to start of test.

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4.1	Prelin	minary Actions (continued)	
	[7]	<b>ENSURE</b> outstanding Design Change Notices (DCNs), Engineering Document Construction Releases (EDCRs), or Temporary Alterations (TAs) do NOT adversely impact testing <b>AND</b>	<b>]</b> ,
		<b>ATTACH</b> documentation of DCNs, EDCRs, and TAs that wer reviewed to the data package.	e 
	[8]	<b>ENSURE</b> a review of outstanding Clearances has been coordinated with U2 Operations for impact to the test performance, <b>AND</b>	
		IF items are found, THEN	
		RECORD in Appendix B, Temporary Condition Log.	
	[9]	<b>ENSURE</b> components contained within the boundaries of this test are under the jurisdictional control of Preoperational Startup Engineering (PSE) and/or Plant Operations.	<u> </u>
	[10]	<b>PERFORM</b> a pretest walkdown on equipment to be tested to ensure no conditions exist that will impact test performance.	
	[11]	<b>CONDUCT</b> a pretest briefing with Test and Operations personnel in accordance with SMP-9.0.	
	[12]	<b>ENSURE</b> that communications are available in areas where testing is to be conducted.	
	[13]	<b>OBTAIN</b> a copy of the Special Instructions For EGTS Dedicated Operator During Performance Of EGTS Testing (o equivalent), to protect Unit 1 during the performance of this PTI, <b>AND</b>	r
		<b>ENSURE</b> that a dedicated operator is available to support these instructions.	
	[14]	<b>REVIEW</b> preventative maintenance for systems/components covered by this test, <b>AND</b>	
		VERIFY no conditions exist that will impact test performance	

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	Data	Pacl	kage: Page of	Date	
4.2	-	cial T plies	ools, Measuring and Test Equipment, Parts, and		
	[1]	ОВ	STAIN the following items:		
		A.	Handheld electrical jumper (Subsections 6.2 and 6.4)		
		B.	Electrical jumper (Subsection 6.3)		

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	Data	Date		
4.3	Field	Prep	parations	
	[1]		RIFY the following systems are operable and have bee ced in service to the extent necessary to perform this te	
		A.	System 32, Control Air System	
		B.	System 55, Annunciator and Sequential Events Reco System	rding 
		C.	System 99, Reactor Protection System	
		D.	System 214, 480V Control and Auxiliary Building Ven Power System	t
		E.	System 235, 120V AC Vital Power System	
		F.	System 236, 125V DC Vital Power System	
		G.	System 261, Integrated Computer System (ICS)	
	<u> </u>		NOTES	
1)			ator points associated with 2-MUX-55-12 and 2-MUX-5 nes at the bottom of each terminal strip.	5-13 ONLY have
2)			sociated with 2-TBK-55-25, 2-TBK-55-26, 2-TBK-55-27, individual switches or a master switch.	and 2-TBK-55-28
	[2]	app	SURE Annunciator applicable TBK Switches are ON, the blicable Master Switches are ON, and window software ut(s) are ENABLED for the following Annunciator Window	
		A.	0-XA-55-27B-233A, ANNULUS VAC FAN 2A FLOW I	
		B.	0-XA-55-27B-234A, ANNULUS VAC FAN 2B FLOW I	
		C.	0-XA-55-27B-233B, U2 ANNULUS DP LO	
		D.	0-XA-55-27B-230D, U2 PNL 0-L-430 TR-A PWR FAII	
		E.	0-XA-55-27B-235D, U2 PNL 0-L-430 TR-B PWR FAII	

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	Data	Pack	kage:	Page _		of		Date _	
4.3	Field	Prep	paratio	ns (cor	ntin	ed)			
	[3]	ENS	SURE	the follo	wir	ICS points are in scan:			
		A.	FD20	15, EG	TS	R-A UNIT 2 SUCT DMPR		_	
		B.	FD20	16, EG	TS	R-A UNIT 2 SUCT DMPR	sw	_	
		C.	FD20	17, EG	ΓS	RAIN A UNIT 2 SUCT DM	PR	_	
		D.	FD20	21, U-2	Sŀ	D BLDG EXH DMPR		-	
		E.	FD20	)22, U-2	SH	D BLDG EXH DMPR SW		-	
		F.	FD20	23, U-2	SH	D BLDG EXH DMPR		-	
		G.	FD23	63, EG	TS	RAIN B UNIT 2 SUCT DM	PR	-	
		Н.	FD23	864, EG	TS	RAIN B UNIT 2 SUCT DM	PR SW	-	
		I.	FD23	865, EG	TS	RAIN B UNIT 2 SUCT DM	PR	-	
		J.	FD23	869, U-2	Sŀ	D BLDG EXH DMPR		-	<del></del>
		K.	FD23	370, U-2	Sŀ	D BLDG EXH DMPR SW		-	<del></del>
		L.	FD23	371, U-2	Sŀ	D BLDG EXH DMPR		-	
		M.	HD20	)19, EG	TS	R-A HS-9A, AND -46A		-	
		N.	HD20	020, EG	TS	R-B SUCT VLV SW		-	
		Ο.	HD20	053, EG	TS	R-B HS-45A, AND -29A		-	
		Ρ.	HD20	)54, EG	TS	R-A SUCT VLV SW		-	
		Q.	HD20	)71, SH	LD	SLDG VENT&ANNS HS-81	A, -83B	-	
		R.	PD20	006, SHI	LD	LDG VENT&ANNS DMPR	2 -80, -88	_	<del></del>
		S.	PD20	008, SHI	LDa	ANNS ISO DMPR -81,86 D	DC PW	_	
		T.	PD20	009, SHI	LD	ANNS ISO DMPR SW		-	
		U.	PD20	)10, SHI	LD	LDG ISO DMPR		-	
		V.	PD20	011, CN	ТМ	ANNS ISO DMPR			

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4.3	Field	Prep	arations (contin	ued)	
		W.	PD2013, SHLD	BLDG VENT&ANNS DMPR -82,89	<del> </del>
		X.	PD2015, SHLD&	ANNS ISO DMPR -83,87 DC PW	
		Y.	PD2016, SHLD&	ANNS ISO DMPR SW	<u></u>
		Z.	PD2017, SHLD E	BLDG ISO DMPR	
		AA.	PD2018, CNTM1	Γ ANNS ISO DMPR	<u> </u>
	[4]		sent by Window 1,	Unit 2 $\varnothing$ A Containment Isolation Signa, $\varnothing$ A, NOT LIT on the following panels	
		A.	TR-A MASTER I (2-XX-55-6C)	SOLATION SIGNAL STATUS PANEL	
		В.	TR-B MASTER I (2-XX-55-6D)	SOLATION SIGNAL STATUS PANEL	
	[5]	liste hav	d on Appendix C, e been (as require	ments required for test performance, Permanent Plant Instrumentation Log, ed) filled, vented, and placed in service alibration interval, <b>AND</b>	
		REC	CORD data on Ap	pendix C.	
	[6]	PEF	RFORM Switch Lir	neup, Appendix D.	
	[7]	PEF	RFORM Electrical	Lineup, Appendix E.	
	[8]		RIFY the U2 Annule Auxiliary Buildir	lus Access Door A78 [EL 713] is OPEN	ı

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4.4	Арр	rovals and Notifica	ations		
	[1]	<b>OBTAIN</b> permissi	ion of the Preoperational Star	tup Manager to start	the test.
			Preoperational Startup Signature	Manager	Date
	[2]	<b>OBTAIN</b> the Unit authorization.	2 Supervisor's (US/SRO) or S	Shift Manager's (SM)	
			U2 US/SRO/SM Sign	nature	Date
	[3]	<b>OBTAIN</b> the Unit authorization.	1 Supervisor's (US/SRO) or S	Shift Manager's (SM)	
			U1 US/SRO/SM Sign		Date

## EMERGENCY GAS TREATMENT SYSTEM LOGIC TEST

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#### 5.0 ACCEPTANCE CRITERIA

- A. Manual controls and indication for the following valves/dampers function in accordance with design requirements:
  - 1. 2-FCV-65-5 (Subsection 6.1.2)
  - 2. 2-FCV-65-4 (Subsection 6.1.3)
  - 3. 2-FCV-65-9 (Subsection 6.1.4)
  - 4. 2-FCV-65-29 (Subsection 6.1.5)
  - 5. 2-FCO-65-46 (Subsection 6.1.6)
  - 6. 2-FCO-65-45 (Subsection 6.1.7)
  - 7. 2-PCV-65-81 (Subsection 6.1.8)
  - 8. 2-PCV-65-86 (Subsection 6.1.8)
  - 9. 2-PCV-65-83 (Subsection 6.1.9)
  - 10. 2-PCV-65-87 (Subsection 6.1.9)
  - 11. 2-FCV-65-7 (Subsection 6.1.10)
  - 12. 2-FCV-65-50 (Subsection 6.1.11)
  - 13. 2-PCO-65-95 (Subsection 6.1.12)
  - 14. 2-PCO-65-96 (Subsection 6.1.13)
- B. The following dampers move to their design position upon a simulated low annulus differential pressure signal:
  - 1. 2-PCO-65-95 OPENS (Step 6.1.12[7]A)
  - 2. 2-PCO-65-96 CLOSES (Step 6.1.13[7]A)
- C. Manual controls and indication for the following annulus vacuum control fans function in accordance with design requirements:
  - 1. 2-FAN-65-77 (Subsection 6.2.2)
  - 2. 2-FAN-65-74 (Subsection 6.2.3)

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#### 5.0 ACCEPTANCE CRITERIA (continued)

- D. The following dampers OPEN when their respective annulus vacuum fan starts, and CLOSE when their respective annulus vacuum fan stops.
  - 1. 2-FCO-65-77 (Steps 6.2.2[7] and 6.2.2[11])
  - 2. 2-FCO-65-74 (Steps 6.2.3[7] and 6.2.3[11])
- E. The following fans START upon a low flow signal from the opposite train fan:
  - 1. 2-FAN-65-77 (Step 6.2.4[3])
  - 2. 2-FAN-65-74 (Step 6.2.4[5])
- F. The following fans STOP upon a simulated U2 ØA Containment Isolation Signal (CIS):
  - 1. 2-FAN-65-77 (Step 6.2.4[18])
  - 2. 2-FAN-65-74 (Step 6.2.4[22])
- G. The following valves CLOSE upon a simulated  $\emptyset A$  CIS:
  - 1. 2-FCV-65-5 (Step 6.3.2[4])
  - 2. 2-FCV-65-4 (Step 6.3.3[4])
- H. The following valves/dampers OPEN upon a simulated ØA CIS:
  - 1. 2-FCV-65-9 (Step 6.3.4[4])
  - 2. 2-FCV-65-29 (Step 6.3.5[4])
  - 3. 2-FCO-65-46 (Step 6.3.6[4])
  - 4. 2-FCO-65-45 (Step 6.3.7[4])
  - 5. 2-PCV-65-81 (Step 6.3.8[4])
  - 6. 2-PCV-65-86 (Step 6.3.8[4])
  - 7. 2-PCV-65-83 (Step 6.3.9[4])
  - 8. 2-PCV-65-87 (Step 6.3.9[4])

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### 5.0 ACCEPTANCE CRITERIA (continued)

- I. The following fans START upon a simulated  $\emptyset A$  CIS:
  - 1. 0-FAN-65-23 (Step 6.4.2[4])
  - 2. 0-FAN-65-42 (Step 6.4.3[4])
- J. The following alarms are annunciated in the Main Control Room (MCR):
  - 1. Low annulus differential pressure (Steps 6.1.12[7]B and 6.1.13[7]B)
  - 2. Low flow, 2-FAN-65-77 (Step 6.2.4[11]A)
  - 3. Low flow, 2-FAN-65-74 (Step 6.2.4[15]A)
  - 4. Train A power failure on 0-L-430 (Step 6.5.4[4]A)
  - 5. Train B power failure on 0-L-430 (Step 6.5.4[4]C)

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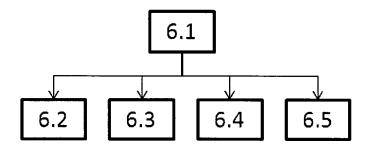
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#### 6.0 PERFORMANCE

#### **NOTES**

1) Subsections of this test shall be performed in the order shown in the flow diagram below. Subsections 6.2, 6.3, 6.4 and 6.5 may be performed in any order after the successful completion of Subsection 6.1. Steps within subsections shall be performed in the order written, unless otherwise noted.



2) Valve, damper, and fan status shall be determined by local observation throughout Section 6.0, unless otherwise stated.

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	Data	Package: Page of	Date	
6.1	Valve and Damper Manual Operation and Controls			
6.1.1	Prelin	minary Actions		
	[1]	<b>VERIFY</b> prerequisites listed in Section 4.0 for SubSection 6.1 have been completed.		

### NOTE

Subsections 6.1.2 thru 6.1.13 may be performed in any order. Steps within these subsections must be performed in the order written.

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	Data	Pack	cage: Page of	Date	
5.1.2	2-FC\	V-65-	5 Manual Operation and Controls		
			NOTE		
Hands OPEN			65-5, U2 ANN VAC FAN SUCT, spring retu	rns to A AUTO from the	
	[1]		SURE Valve 2-FCV-65-5, CNTMT ANN VAC 7/A12V], is CLOSED.	FANS SUCT	
	[2]		ACE Handswitch 2-HS-65-5, U2 ANN VAC I M-27B], to A AUTO, AND	FAN SUCT	
			RIFY Valve 2-FCV-65-5, CNTMT ANN VAC	FANS SUCT, is	
	[3]		ACE and HOLD Handswitch 2-HS-65-5, U2 CT, to OPEN, AND	ANN VAC FAN	
			RIFY Valve 2-FCV-65-5, CNTMT ANN VAC EN.	FANS SUCT, is	
	[4]		RIFY status lights on Handswitch 2-HS-65-5 N SUCT, are:	, U2 ANN VAC	
		A.	Green Light OFF		
		B.	Red Light ON		
	[5]		RIFY status lights on Train A Containment Is nel (CISP) 2-XX-55-6E, Window 80, FCV-65		
		A.	Green Light OFF	<u></u>	
		В.	Red Light ON		
	[6]		L <b>EASE</b> Handswitch 2-HS-65-5, U2 ANN VA A AUTO, <b>AND</b>	C FAN SUCT,	

VERIFY Valve 2-FCV-65-5, CNTMT ANN VAC FANS SUCT, is

OPEN.

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	Data	Package: Page of	Date
6.1.2	2-FC	V-65-5 Manual Operation and Controls (continued)	
	[7]	<b>PLACE</b> Handswitch 2-HS-65-5, U2 ANN VAC FAN SUCT, to CLOSE, <b>AND</b>	
		<b>VERIFY</b> Valve 2-FCV-65-5, CNTMT ANN VAC FANS SUCT, i CLOSED.	s 
	[8]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-5, U2 ANN VAC FAN SUCT, are:	
		A. Green Light ON	
		B. Red Light OFF	
	[9]	<b>VERIFY</b> status lights on Train A CISP 2-XX-55-6E, Window 80, FCV-65-5 are:	
		A. Green Light ON	
		B. Red Light OFF	
	[10]	VERIFY successful completion of this Subsection 6.1.2. (Acc Crit)	

[6]

to A AUTO, AND

ISLN VLV, is OPEN.

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	Data	Package: Page of	Date
6.1.3	2-FC	V-65-4 Manual Operation and Controls	
		NOTE	
	switch :	2-HS-65-4, U2 ANN VAC FAN SUCT, sprir on.	ng returns to A AUTO from the
	[1]	ENSURE Valve 2-FCV-65-4, CNTM ANN ISLN VLV [757/A12V], is CLOSED.	NULUS VAC FANS
	[2]	<b>PLACE</b> Handswitch 2-HS-65-4, U2 ANN [0-M-27B], to A AUTO, <b>AND</b>	I VAC FAN SUCT
		<b>VERIFY</b> Valve 2-FCV-65-4, CNTM ANNIISLN VLV, is CLOSED.	ULUS VAC FANS
	[3]	PLACE and HOLD Handswitch 2-HS-65 SUCT, to OPEN, AND	i-4, U2 ANN VAC FAN
		<b>VERIFY</b> Valve 2-FCV-65-4, CNTM ANNI ISLN VLV, is OPEN.	ULUS VAC FANS
	[4]	<b>VERIFY</b> status lights on Handswitch 2-H FAN SUCT, are:	S-65-4, U2 ANN VAC
		A. Green Light OFF	
		B. Red Light ON	
	[5]	<b>VERIFY</b> status lights on Train B Contain Panel (CISP) 2-XX-55-6F, Window 80, F	
		A. Green Light OFF	
		B. Red Light ON	

RELEASE Handswitch 2-HS-65-4, U2 ANN VAC FAN SUCT,

VERIFY Valve 2-FCV-65-4, CNTM ANNULUS VAC FANS

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	Data	Package: Page of	ate
6.1.3	2-FC	V-65-4 Manual Operation and Controls (continued)	
	[7]	<b>PLACE</b> Handswitch 2-HS-65-4, U2 ANN VAC FAN SUCT, to CLOSE, <b>AND</b>	
		<b>VERIFY</b> Valve 2-FCV-65-4, CNTM ANNULUS VAC FANS ISLN VLV, is CLOSED.	
	[8]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-4, U2 ANN VAC FAN SUCT, are:	
		A. Green Light ON	
		B. Red Light OFF	
	[9]	<b>VERIFY</b> status lights on Train B CISP 2-XX-55-6F, Window 80, FCV-65-4 are:	
		A. Green Light ON	
		B. Red Light OFF	
	[10]	VERIFY successful completion of this Subsection 6.1.3. (Acc Crit)	

# EMERGENCY GAS TREATMENT SYSTEM LOGIC TEST

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	Data	Package: Page of	ate
6.1.4	2-FC	V-65-9 Manual Operation and Controls	
	[1]	<b>ENSURE</b> Valve 2-FCV-65-9, EGTS TRAIN A UNIT 2 SUCT ISOL [757/A12V], is CLOSED.	
	[2]	<b>PLACE</b> Handswitch 2-HS-65-9, EGTS TR-A U2 SUCT DMPR [0-M-27B], to A AUTO, <b>AND</b>	
		<b>VERIFY</b> Valve 2-FCV-65-9, EGTS TRAIN A UNIT 2 SUCT ISOL, is CLOSED.	<u>_ · </u>
	[3]	<b>PLACE</b> Handswitch 2-HS-65-9, EGTS TR-A U2 SUCT DMPR, to OPEN, <b>AND</b>	
		<b>VERIFY</b> Valve 2-FCV-65-9, EGTS TRAIN A UNIT 2 SUCT ISOL, is OPEN.	
	[4]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-9, EGTS TR-A U2 SUCT DMPR, are:	
		A. Green Light OFF	
		B. Red Light ON	
	[5]	<b>PLACE</b> Handswitch 2-HS-65-9, EGTS TR-A U2 SUCT DMPR, to CLOSE, <b>AND</b>	
		<b>VERIFY</b> Valve 2-FCV-65-9, EGTS TRAIN A UNIT 2 SUCT ISOL, is CLOSED.	
	[6]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-9, EGTS TR-A U2 SUCT DMPR, are:	
		A. Green Light ON	
		B. Red Light OFF	
	[7]	<b>PLACE</b> Handswitch 2-HS-65-9, EGTS TR-A U2 SUCT DMPR, to OPEN, <b>AND</b>	
		<b>VERIFY</b> Valve 2-FCV-65-9, EGTS TRAIN A UNIT 2 SUCT ISOL, is OPEN.	

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	Data Package: Page of Da		Date	
6.1.4	5.1.4 2-FCV-65-9 Manual Operation and Controls (continued)			
	[8]	<b>PLACE</b> Handswitch 2-HS-65-9, EGTS TR-A U2 SUCT DMF to A AUTO, <b>AND</b>	PR,	
		<b>VERIFY</b> Valve 2-FCV-65-9, EGTS TRAIN A UNIT 2 SUCT ISOL, is CLOSED.		
	[9]	VERIFY successful completion of this Subsection 6.1.4. (Acc Crit)		

### EMERGENCY GAS TREATMENT SYSTEM LOGIC TEST

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	Data	Package: Page of	Date
6.1.5	2-FC	V-65-29 Manual Operation and Controls	
	[1]	<b>ENSURE</b> Valve 2-FCV-65-29, EGTS TRAIN B UNIT 2 SUCT ISOL [757/A12V], is CLOSED.	
	[2]	<b>PLACE</b> Handswitch 2-HS-65-29, EGTS TR-B U2 SUCT DMPR [0-M-27B], to A AUTO, <b>AND</b>	
		<b>VERIFY</b> Valve 2-FCV-65-29, EGTS TRAIN B UNIT 2 SUCT ISOL, is CLOSED.	
	[3]	<b>PLACE</b> Handswitch 2-HS-65-29, EGTS TR-B U2 SUCT DMPR, to OPEN, <b>AND</b>	
		<b>VERIFY</b> Valve 2-FCV-65-29, EGTS TRAIN B UNIT 2 SUCT ISOL, is OPEN.	
	[4]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-29, EGTS TR-B U2 SUCT DMPR, are:	
		A. Green Light OFF	
		B. Red Light ON	
	[5]	<b>PLACE</b> Handswitch 2-HS-65-29, EGTS TR-B U2 SUCT DMPR, to CLOSE, <b>AND</b>	
		<b>VERIFY</b> Valve 2-FCV-65-29, EGTS TRAIN B UNIT 2 SUCT ISOL, is CLOSED.	
	[6]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-29, EGTS TR-B U2 SUCT DMPR, are:	
		A. Green Light ON	
		B. Red Light OFF	
	[7]	<b>PLACE</b> Handswitch 2-HS-65-29, EGTS TR-B U2 SUCT DMPR, to OPEN, <b>AND</b>	
		<b>VERIFY</b> Valve 2-FCV-65-29, EGTS TRAIN B UNIT 2 SUCT ISOL, is OPEN.	

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	Data	Date	
6.1.5	2-FC	V-65-29 Manual Operation and Controls (continued)	
	[8]	<b>PLACE</b> Handswitch 2-HS-65-29, EGTS TR-B U2 SUCT DMPR, to A AUTO, <b>AND</b>	
		<b>VERIFY</b> Valve 2-FCV-65-29, EGTS TRAIN B UNIT 2 SUCT ISOL, is CLOSED.	
	[9]	VERIFY successful completion of this Subsection 6.1.5. (Acc Crit)	

# EMERGENCY GAS TREATMENT SYSTEM LOGIC TEST

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	Data	Package: Page of	Date
6.1.6	2-FC	O-65-46 Manual Operation and Controls	
	[1]	<b>ENSURE</b> Valve 2-FCO-65-46, EGTS TO U2 SHIELD BLDG [757/A12V], is CLOSED.	-
	[2]	<b>PLACE</b> Handswitch 2-HS-65-46, EGTS TO U2 SHIELD BLDG [0-M-27B], to A AUTO, <b>AND</b>	3
		VERIFY Valve 2-FCO-65-46, EGTS TO U2 SHIELD BLDG, is CLOSED.	<u></u>
	[3]	<b>PLACE</b> Handswitch 2-HS-65-46, EGTS TO U2 SHIELD BLDG, to OPEN, <b>AND</b>	
		<b>VERIFY</b> Valve 2-FCO-65-46, EGTS TO U2 SHIELD BLDG, is OPEN.	·
	[4]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-46, EGTS TO U2 SHIELD BLDG, are:	
		A. Green Light OFF	
		B. Red Light ON	
	[5]	<b>PLACE</b> Handswitch 2-HS-65-46, EGTS TO U2 SHIELD BLDG, to CLOSE, <b>AND</b>	
		VERIFY Valve 2-FCO-65-46, EGTS TO U2 SHIELD BLDG, is CLOSED.	
	[6]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-46, EGTS TO U2 SHIELD BLDG, are:	
		A. Green Light ON	
		B. Red Light OFF	
	[7]	<b>PLACE</b> Handswitch 2-HS-65-46, EGTS TO U2 SHIELD BLDG, to OPEN, <b>AND</b>	
		VERIFY Valve 2-FCO-65-46, EGTS TO U2 SHIELD BLDG, is	i

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	Data	Date	
6.1.6	2-FC	O-65-46 Manual Operation and Controls (continued)	
	[8]	<b>PLACE</b> Handswitch 2-HS-65-46, EGTS TO U2 SHIELD BLDG, to A AUTO, <b>AND</b>	
		<b>VERIFY</b> Valve 2-FCO-65-46, EGTS TO U2 SHIELD BLDG, CLOSED.	is
	[9]	VERIFY successful completion of this Subsection 6.1.6. (Acc Crit)	

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	Data	Package: Page of	Date	
6.1.7	2-FC	2-FCO-65-45 Manual Operation and Controls		
	[1]	<b>ENSURE</b> Valve 2-FCO-65-45, EGTS TO U2 SHIELD BLDG [757/A12V], is CLOSED.		
	[2]	<b>PLACE</b> Handswitch 2-HS-65-45, EGTS TO U2 SHIELD BLDG [0-M-27B], to A AUTO, <b>AND</b>	<b>)</b>	
		<b>VERIFY</b> Valve 2-FCO-65-45, EGTS TO U2 SHIELD BLDG, is CLOSED.		
	[3]	<b>PLACE</b> Handswitch 2-HS-65-45, EGTS TO U2 SHIELD BLDG, to OPEN, <b>AND</b>		
		<b>VERIFY</b> Valve 2-FCO-65-45, EGTS TO U2 SHIELD BLDG, is OPEN.		
	[4]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-45, EGTS TO U2 SHIELD BLDG, are:		
		A. Green Light OFF		
		B. Red Light ON		
	[5]	<b>PLACE</b> Handswitch 2-HS-65-45, EGTS TO U2 SHIELD BLDG, to CLOSE, <b>AND</b>		
		<b>VERIFY</b> Valve 2-FCO-65-45, EGTS TO U2 SHIELD BLDG, is CLOSED.		
	[6]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-45, EGTS TO U2 SHIELD BLDG, are:		
		A. Green Light ON		
		B. Red Light OFF		
	[7]	<b>PLACE</b> Handswitch 2-HS-65-45, EGTS TO U2 SHIELD BLDG, to OPEN, <b>AND</b>		
		VERIFY Valve 2-FCO-65-45, EGTS TO U2 SHIELD BLDG, is		

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	Data	Package: Page of	Date
6.1.7	2-FC		
	[8]	<b>PLACE</b> Handswitch 2-HS-65-45, EGTS TO U2 SHIELD BLDG, to A AUTO, <b>AND</b>	
		<b>VERIFY</b> Valve 2-FCO-65-45, EGTS TO U2 SHIELD BLDG, CLOSED.	is 
	[9]	VERIFY successful completion of this Subsection 6.1.7. (Acc Crit)	

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	Data	a Pack	kage: Page of	Date
5.1.8	2-P0	CV-65	-81 and 2-PCV-65-86 Manual Operation a	nd Controls
			NOTES	
1)			2-HS-65-81/86, U2 EGTS-ANN $\Delta$ P CNTLR Ane OPEN position.	A ISOL, spring returns to A
2)	Handsv valves:	vitch 2	-HS-65-81/86, U2 EGTS-ANN ΔP CNTLR A	A ISOL, controls the following
	• 2-	PCV-6	5-81, EGTS UNIT 2 SHIELD BLDG EXHAU	JST VENT ISOL
	• 2-1	PCV-6	5-86, EGTS CNTMT ANNULUS ISOLATIO	N
	[1]	EN:	SURE the following valves are CLOSED:	
		A.		G EXHAUST
		В.	2-PCV-65-86, EGTS CNTMT ANNULUS I [ANN 834/AZ360]	SOLATION
	[2]		ACE Handswitch 2-HS-65-81/86, U2 EGTS- TLR A ISOL [0-M-27B], to A AUTO, <b>AND</b>	-ΑΝΝ ΔΡ
		VE	RIFY the following valves are CLOSED:	
		A.	2-PCV-65-81, EGTS UNIT 2 SHIELD BLD VENT ISOL	G EXHAUST
		B.	2-PCV-65-86, EGTS CNTMT ANNULUS I	SOLATION
	[3]		ACE and HOLD Handswitch 2-HS-65-81/86 TS-ANN ∆P CNTLR A ISOL, to OPEN, AND	•
		VEI	RIFY the following valves are OPEN:	
		A.	2-PCV-65-81, EGTS UNIT 2 SHIELD BLD VENT ISOL	G EXHAUST

B. 2-PCV-65-86, EGTS CNTMT ANNULUS ISOLATION

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	Data	Package: Page of	Date
6.1.8	2-PC\ (cont		
	[4]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-81/86, U2 EGTS-ANN $\Delta P$ CNTLR A ISOL, are:	
		A. Green Light OFF, 81	
		B. Red Light ON, 81	
		C. Green Light OFF, 86	
		D. Red Light ON, 86	
	[5]	<b>RELEASE</b> Handswitch 2-HS-65-81/86, U2 EGTS-ANN $\Delta P$ CNTLR A ISOL, to A AUTO, <b>AND</b>	
		VERIFY the following valves are OPEN:	
		A. 2-PCV-65-81, EGTS UNIT 2 SHIELD BLDG EXHAUST VENT ISOL	
		B. 2-PCV-65-86, EGTS CNTMT ANNULUS ISOLATION	
	[6]	<b>PLACE</b> Handswitch 2-HS-65-81/86, U2 EGTS-ANN $\Delta P$ CNTLR A ISOL, to CLOSE, <b>AND</b>	
		VERIFY the following valves are CLOSED:	
		A. 2-PCV-65-81, EGTS UNIT 2 SHIELD BLDG EXHAUST VENT ISOL	
		B. 2-PCV-65-86, EGTS CNTMT ANNULUS ISOLATION	
	[7]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-81/86, U2 EGTS-ANN $\Delta P$ CNTLR A ISOL, are:	
		A. Green Light ON, 81	
		B. Red Light OFF, 81	
		C. Green Light ON, 86	
		D. Red Light OFF, 86	
	[8]	VERIFY successful completion of this Subsection 6.1.8. (Acc Crit)	

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#### 6.1.9 2-PCV-65-83 and 2-PCV-65-87 Manual Operation and Controls

#### **NOTES**

- 1) Handswitch 2-HS-65-83/87, U2 EGTS-ANN △P CNTLR B ISOL, spring returns to A AUTO from the OPEN position.
- 2) Handswitch 2-HS-65-83/87, U2 EGTS-ANN ΔP CNTLR B ISOL, controls the following valves:
  - 2-PCV-65-83, EGTS UNIT 2 SHIELD BLDG EXHAUST VENT ISOL
  - 2-PCV-65-87, EGTS CNTMT ANNULUS ISOLATION

[1]	ENSURE the following valves are CLOSED:						
	A. 2-PCV-65-83, EGTS UNIT 2 SHIELD BLDG EXHAUST VENT ISOL [ANN 834/AZ360]						
	B. 2-PCV-65-87, EGTS CNTMT ANNULUS ISOLATION [ANN 834/AZ360]						
[2]	<b>PLACE</b> Handswitch 2-HS-65-83/87, U2 EGTS-ANN $\Delta P$ CNTLR B ISOL [0-M-27B], to A AUTO, <b>AND</b>						
	VERIFY the following valves are CLOSED:						
	A. 2-PCV-65-83, EGTS UNIT 2 SHIELD BLDG EXHAUST VENT ISOL						
	B. 2-PCV-65-87, EGTS CNTMT ANNULUS ISOLATION						
[3]	<b>PLACE</b> and <b>HOLD</b> Handswitch 2-HS-65-83/87, U2 EGTS-ANN $\Delta P$ CNTLR B ISOL, to OPEN, <b>AND</b>						
	VERIFY the following valves are OPEN:						
	A. 2-PCV-65-83, EGTS UNIT 2 SHIELD BLDG EXHAUST VENT ISOL						
	B. 2-PCV-65-87, EGTS CNTMT ANNULUS ISOLATION						

# EMERGENCY GAS TREATMENT SYSTEM LOGIC TEST

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	Data	Package: Page of	Date
6.1.9	2-PC' (cont		
	[4]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-83/87, U2 EGTS-ANN $\Delta P$ CNTLR B ISOL, are:	
		A. Green Light OFF, 83	
		B. Red Light ON, 83	
		C. Green Light OFF, 87	
		D. Red Light ON, 87	
	[5]	<b>RELEASE</b> Handswitch 2-HS-65-83/87, U2 EGTS-ANN $\Delta P$ CNTLR B ISOL, to A AUTO, <b>AND</b>	
		VERIFY the following valves are OPEN:	
		A. 2-PCV-65-83, EGTS UNIT 2 SHIELD BLDG EXHAUST VENT ISOL	<del></del> .
		B. 2-PCV-65-87, EGTS CNTMT ANNULUS ISOLATION	<del></del>
	[6]	<b>PLACE</b> Handswitch 2-HS-65-83/87, U2 EGTS-ANN $\Delta P$ CNTLR B ISOL, to CLOSE, <b>AND</b>	
		VERIFY the following valves are CLOSED:	
		A. 2-PCV-65-83, EGTS UNIT 2 SHIELD BLDG EXHAUST VENT ISOL	
		B. 2-PCV-65-87, EGTS CNTMT ANNULUS ISOLATION	
	[7]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-83/87, U2 EGTS-ANN $\Delta P$ CNTLR B ISOL, are:	
		A. Green Light ON, 83	
		B. Red Light OFF, 83	
		C. Green Light ON, 87	
		D. Red Light OFF, 87	
	[8]	VERIFY successful completion of this Subsection 6.1.9. (Acc Crit)	

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	Data	Package: Page of	Date
6.1.10	2-FC	V-65-7 Manual Operation and Controls	
	[1]	<b>ENSURE</b> Valve 2-FCV-65-7, EGTS TRAIN A UNIT 2 SUCT ISOL [757/A12V], is CLOSED.	
	[2]	<b>PLACE</b> Handswitch 2-HS-65-7, EGTS FAN A U2 SUCT DMPR [0-M-27B], to OPEN, <b>AND</b>	
		<b>VERIFY</b> Valve 2-FCV-65-7, EGTS TRAIN A UNIT 2 SUCT ISOL, is OPEN.	
	[3]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-7, EGTS FAN AU2 SUCT DMPR, are:	4
		A. Green Light OFF	
		B. Red Light ON	
	[4]	<b>PLACE</b> Handswitch 2-HS-65-7, EGTS FAN A U2 SUCT DMPR, to CLOSE, <b>AND</b>	
		<b>VERIFY</b> Valve 2-FCV-65-7, EGTS TRAIN A UNIT 2 SUCT ISOL, is CLOSED.	
	[5]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-7, EGTS FAN AU2 SUCT DMPR, are:	4
		A. Green Light ON	
		B. Red Light OFF	
	[6]	VERIFY successful completion of this Subsection 6.1.10. (Acc Crit)	

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	Data	Package: Page of	Date
6.1.11	2-FC		
	[1]	<b>ENSURE</b> Valve 2-FCV-65-50, EGTS TRAIN B UNIT 2 SUCT ISOL [757/A12V], is CLOSED.	· 
	[2]	PLACE Handswitch 2-HS-65-50, EGTS TR-B U2 SUCT DMPR [0-M-27B], to OPEN, AND	
		<b>VERIFY</b> Valve 2-FCV-65-50, EGTS TRAIN B UNIT 2 SUCT ISOL, is OPEN.	
	[3]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-50, EGTS TR-EU2 SUCT DMPR, are:	3
		A. Green Light OFF	
		B. Red Light ON	
	[4]	<b>PLACE</b> Handswitch 2-HS-65-50, EGTS TR-B U2 SUCT DMPR, to CLOSE, <b>AND</b>	
		<b>VERIFY</b> Valve 2-FCV-65-50, EGTS TRAIN B UNIT 2 SUCT ISOL, is CLOSED.	
	[5]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-50, EGTS TR-EU2 SUCT DMPR, are:	3
		A. Green Light ON	
		B. Red Light OFF	***
	[6]	VERIFY successful completion of this Subsection 6.1.11.	

**WBN** 

#### **EMERGENCY GAS TREATMENT**

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Unit 2			SYSTEM LOGIC TEST	Rev. 0000 Page 43 of 101		
	Data	Packa	age: Page of	Date		
6.1.	12 2-PC	O-65-9	95 Manual Operation and Controls			
			CAUTION			
Wo	rk in Auxi	liary R	elay Rack 2-R-75 involves energized circu	uits.		
			NOTES			
1)			HS-65-95, EGTS CNTMT ANN VAC FAN O from the OPEN and CLOSE positions.	S PURGE ISOL DMPR, spring		
2)	Each fus		nis section has a blown fuse indicator which or circuit.	h must be oriented towards		
	[1]	ANN SEP	L Fuse 2-FU-275-R75/K6, EGTS CONTA ULUS PURGE DIFFERENTIAL PRESSU ARATION RELAYS, from 2-R-75 to simula ainment annulus differential pressure.	RE		
		COITE	anment annulus umerentiai pressure.	1st		
				CV		
	[2]	FAN	<b>CE</b> Handswitch 2-HS-65-95, EGTS CNTM S PURGE ISOL DMPR [0-JB-292-1165, 7 SE, <b>AND</b>			
			IFY Damper 2-PCO-65-95, EGTS CNTM S PURGE ISOL DMPR [757/A12V], is CL			
	[3]		<b>CE</b> Handswitch 2-HS-65-95, EGTS CNTM S PURGE ISOL DMPR, to OPEN, <b>AND</b>	IT ANN VAC		
			IFY Damper 2-PCO-65-95, EGTS CNTM S PURGE ISOL DMPR, is OPEN.	ANN VAC		
	[4]		<b>CE</b> Handswitch 2-HS-65-95, EGTS CNTM S PURGE ISOL DMPR, to CLOSE, <b>AND</b>	IT ANN VAC		
			IFY Damper 2-PCO-65-95, EGTS CNTM7 S PURGE ISOL DMPR, is CLOSED.	ANN VAC		
	[5]	VER	IFY Annunciator Window 0-XA-55-27B-23	3B, U2		

ANNULUS DP LO, is CLEAR.

# EMERGENCY GAS TREATMENT SYSTEM LOGIC TEST

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	Data	Pack	rage: Page of	Date
6.1.12	2-PC	O-65	-95 Manual Operation and Controls (continued)	
	[6]	ANI SEI	STALL Fuse 2-FU-275-R75/K6, EGTS CONTAINMENT NULUS PURGE DIFFERENTIAL PRESSURE PARATION RELAYS, into 2-R-75 to simulate low stainment annulus differential pressure.	
		0011	nammont armaias amoronilai procedire.	1st
				CV
	[7]	VEI	RIFY the following:	
		A.	Damper 2-PCO-65-95, EGTS CNTMT ANN VAC FANS PURGE ISOL DMPR, is OPEN. (Acc Crit)	
		B.	Annunciator Window 0-XA-55-27B-233B, U2 ANNULUS DP LO, ALARMS. <b>(Acc Crit)</b>	
		C.	Unit 2 Alarm Events Display Screen indicates 233-B U2 ANNULUS DP LO is in ALARM (Red).	
	[8]	ANI SEI	LL Fuse 2-FU-275-R75/K6, EGTS CONTAINMENT NULUS PURGE DIFFERENTIAL PRESSURE PARATION RELAYS, from 2-R-75 to simulate normal Itainment annulus differential pressure.	
			·	1st
				CV
	[9]	VEI	RIFY the following:	
		A.	Damper 2-PCO-65-95, EGTS CNTMT ANN VAC FANS PURGE ISOL DMPR, is OPEN.	
		B.	Annunciator Window 0-XA-55-27B-233B, U2 ANNULUS DP LO, is CLEAR.	9.44
		C.	Unit 2 Alarm Events Display Screen indicates 233-B U2 ANNULUS DP LO is in NORMAL (Green).	
	[10]		ACE Handswitch 2-HS-65-95, EGTS CNTMT ANN VAC NS PURGE ISOL DMPR, to CLOSE, AND	
			RIFY Damper 2-PCO-65-95, EGTS CNTMT ANN VAC NS PURGE ISOL DMPR, is CLOSED.	

# EMERGENCY GAS TREATMENT SYSTEM LOGIC TEST

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	Data	Package: Page of	Date _	
6.1.12	2-PC			
	[11]	INSTALL Fuse 2-FU-275-R75/K6, EGTS CONTAINMENT ANNULUS PURGE DIFFERENTIAL PRESSURE SEPARATION RELAYS, into 2-R-75.	_	
				1st
			_	CV
	[12]	VERIFY successful completion of this Subsection 6.1.12. (Acc Crit)	_	

**WBN** 

#### **EMERGENCY GAS TREATMENT**

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	Unit 2	SYSTEM LOGIC TEST	Rev. 0000 Page 46 of 101
	Data	Package: Page of	Date
5. <b>1</b> .1	13 2-PC(	O-65-96 Manual Operation and Controls	
		CAUTION	
Wo	rk in Auxil	liary Relay Rack 2-R-75 involves energized	circuits.
		NOTES	
1)		itch 2-HS-65-96, EGTS CNTMT ANN VAC to AUTO from the OPEN and CLOSE positi	, i 0
2)		se in this section has a blown fuse indicator unciator circuit.	which must be oriented towards
	[1]	PULL Fuse 2-FU-275-R75/K16, EGTS C ANNULUS PURGE DIFFERENTIAL PRE SEPARATION RELAY, from 2-R-75 to sin containment annulus differential pressure	SSURE ANN mulate normal
		<b>F</b>	1st CV
	[2]	PLACE Handswitch 2-HS-65-96, EGTS 0 FANS PURGE ISOL DMPR [0-JB-292-11 OPEN, AND	
		<b>VERIFY</b> Damper 2-PCO-65-96, EGTS CI FANS PURGE ISOL DMPR [757/A12V],	
	[3]	PLACE Handswitch 2-HS-65-96, EGTS (FANS PURGE ISOL DMPR, to CLOSE, A	
		<b>VERIFY</b> Damper 2-PCO-65-96, EGTS CI FANS PURGE ISOL DMPR, is CLOSED.	
	[4]	PLACE Handswitch 2-HS-65-96, EGTS (FANS PURGE ISOL DMPR, to OPEN, A	
		<b>VERIFY</b> Damper 2-PCO-65-96, EGTS CI FANS PURGE ISOL DMPR, is OPEN.	NTMT ANN VAC
	[5]	<b>VERIFY</b> Annunciator Window 0-XA-55-27 ANNULUS DP LO, is CLEAR.	<b>7</b> B-233B, U2

# EMERGENCY GAS TREATMENT SYSTEM LOGIC TEST

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	Data	Package: Page of	Date _	
6.1.13	2-PC	0-65-96 Manual Operation and Controls (c	ontinued)	
	[6]	INSTALL Fuse 2-FU-275-R75/K16, EGTS OF ANNULUS PURGE DIFFERENTIAL PRESS SEPARATION RELAY, into 2-R-75 to simula containment annulus differential pressure.	SURE ANN	
		,	_	1st
			_	CV
	[7]	VERIFY the following:		
		A. Damper 2-PCO-65-96, EGTS CNTMT A PURGE ISOL DMPR, is CLOSED. (Ac		
		B. Annunciator Window 0-XA-55-27B-233 DP LO, ALARMS. (Acc Crit)	B, U2 ANNULUS -	
		C. Unit 2 Alarm Events Display Screen ind ANNULUS DP LO is in ALARM (Red).	dicates 233-B U2 –	
	[8]	<b>PULL</b> Fuse 2-FU-275-R75/K16, EGTS CON ANNULUS PURGE DIFFERENTIAL PRESS SEPARATION RELAY, from 2-R-75 to simulation containment annulus differential pressure.	SURE ANN	
		F	_	1st
				CV
	[9]	VERIFY the following:		
		A. Damper 2-PCO-65-96, EGTS CNTMT A PURGE ISOL DMPR, is CLOSED.	ANN VAC FANS -	W. C
		B. Annunciator Window 0-XA-55-27B-233 DP LO, is CLEAR.	B, U2 ANNULUS -	
		C. Unit 2 Alarm Events Display Screen ind ANNULUS DP LO is in NORMAL (Gree		
	[10]	<b>PLACE</b> Handswitch 2-HS-65-96, EGTS CN FANS PURGE ISOL DMPR, to OPEN, <b>AND</b>		
		<b>VERIFY</b> Damper 2-PCO-65-96, EGTS CNT FANS PURGE ISOL DMPR is OPEN	MT ANN VAC	

#### EMERGENCY GAS TREATMENT SYSTEM LOGIC TEST

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	Data	Package: Page of	Date _	
6.1.13	1.13 2-PCO-65-96 Manual Operation and Controls (continued)			
	[11]	INSTALL Fuse 2-FU-275-R75/K16, EGTS CONTAINMENT ANNULUS PURGE DIFFERENTIAL PRESSURE ANN SEPARATION RELAY, into 2-R-75.		
			_	1st
			_	CV
	[12]	VERIFY successful completion of this Subsection 6.1.13. (Acc Crit)	_	

#### EMERGENCY GAS TREATMENT SYSTEM LOGIC TEST

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	Data	Package: Page of Da	ite
6.2	Cont	tainment Annulus Vacuum Fan Logic Test	
6.2.1	Preli	minary Actions	
	[1]	<b>VERIFY</b> prerequisites listed in Section 4.0 for SubSection 6.2 have been completed.	
		CAUTION	
Circui	ts insid	le 0-JB-292-1165 shall be considered energized.	
	[2]	LIFT the following wires in 0-JB-292-1165 [757/A12V] to disable the low flow start signals:	
		A. Wire 13C3 on Terminal Block TD	4-1
			1st 
			CV
		B. Wire 13C3 on Terminal Block TB	1st
			CV
	[3]	<b>PLACE</b> Handswitch 2-HS-65-5, U2 ANN VAC FAN SUCT [0-M-27B], to OPEN, <b>AND</b>	
		<b>VERIFY</b> Valve 2-FCV-65-5, CNTMT ANN VAC FANS SUCT [757/A12V], is OPEN.	
	[4]	<b>PLACE</b> Handswitch 2-HS-65-4, U2 ANN VAC FAN SUCT [0-M-27B], to OPEN, <b>AND</b>	
		<b>VERIFY</b> Valve 2-FCV-65-4, CNTM ANNULUS VAC FANS ISLN VLV [757/A12V], is OPEN.	
	[5]	PLACE the following breakers in ON:	
		A. 2-BKR-65-77, EGTS CNTMT ANN VAC FAN 2A (2-FAN-65-77) [480V C&A Vent Bd 2A1-A Compt 13C]	
		B. 2-BKR-65-74, EGTS CNTMT ANN VAC FAN 2B (2-MTR-65-74) [480V C&A Vent Bd 2B1-B Compt 13C]	

#### EMERGENCY GAS TREATMENT SYSTEM LOGIC TEST

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#### NOTE

1) Subsections 6.2.2 and 6.2.3 may be performed in any order. Steps within these subsections must be performed in the order written. Subsection 6.2.4 shall be performed after completion of subsections 6.2.2 and 6.2.3.

#### 6.2.2 2-FAN-65-77 Manual Operation and Controls

#### **NOTE**

Handswitch 2-HS-65-77A, ANN VAC FAN 2A & SUCT FCO, spring returns to A-P AUTO from the START and STOP positions.

[1]	<b>ENSURE</b> Fan 2-FAN-65-77, EGTS CNTMT ANN VAC FAN 2A [757/A12V] is OFF.			
[2]	PLACE Handswitch 2-HS-65-77A, ANN VAC FAN 2A & SUCT FCO [0-M-27B], to STOP, AND			
	<b>VERIFY</b> Fan 2-FAN-65-77, EGTS CNTMT ANN VAC FAN 2A, is OFF.			
[3]	<b>VERIFY</b> Damper 2-FCO-65-77, EGTS CNTMT ANN VAC FAN 2A SUCT ISOLATION [757/A12V], is CLOSED.			
[4]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-77A, ANN VAC FAN 2A & SUCT FCO, are:			
	A. Green Light ON			
	B. Red Light OFF			
[5]	<b>VERIFY</b> the Red status light on Breaker 2-BKR-65-77, EGTS CNTMT ANN VAC FAN 2A (2-FAN-65-77), is OFF.			
[6]	<b>PLACE</b> Handswitch 2-HS-65-77A, ANN VAC FAN 2A & SUCT FCO, to START, <b>AND</b>			
	<b>VERIFY</b> Fan 2-FAN-65-77, EGTS CNTMT ANN VAC FAN 2A, is ON.			

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6.2.2	2-FA	N-65-77 Manual Operation and Controls (continued)	
	[7]	<b>VERIFY</b> Damper 2-FCO-65-77, EGTS CNTMT ANN VAC FAN 2A SUCT ISOLATION, is OPEN. <b>(Acc Crit)</b>	
	[8]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-77A, ANN VAC FAN 2A & SUCT FCO, are:	;
		A. Green Light OFF	
		B. Red Light ON	*******
	[9]	<b>VERIFY</b> the Red status light on Breaker 2-BKR-65-77, EGTS CNTMT ANN VAC FAN 2A (2-FAN-65-77), is ON.	
	[10]	<b>PLACE</b> Handswitch 2-HS-65-77A, ANN VAC FAN 2A & SUC FCO, to STOP, <b>AND</b>	т
		<b>VERIFY</b> Fan 2-FAN-65-77, EGTS CNTMT ANN VAC FAN 24 is OFF.	A, 
	[11]	<b>VERIFY</b> Damper 2-FCO-65-77, EGTS CNTMT ANN VAC FAN 2A SUCT ISOLATION, is CLOSED. <b>(Acc Crit)</b>	
	[12]	PRESS the START pushbutton on Handswitch 2-HS-65-77B, EGTS CNTMT ANN VAC FAN 2A SUCT ISOL DMPR [0-JB-292-1165, 757/A12V], AND	,
		<b>VERIFY</b> Fan 2-FAN-65-77, EGTS CNTMT ANN VAC FAN 24 is ON.	A, 
	[13]	<b>PRESS</b> the STOP pushbutton on Handswitch 2-HS-65-77B, EGTS CNTMT ANN VAC FAN 2A SUCT ISOL DMPR, <b>AND</b>	
		<b>VERIFY</b> Fan 2-FAN-65-77, EGTS CNTMT ANN VAC FAN 24 is OFF.	A,
	[14]	VERIFY successful completion of this Subsection 6.2.2. (Acc Crit)	

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#### 6.2.3 2-FAN-65-74 Manual Operation and Controls

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N	U.		r	-

Handswitch 2-HS-65-74A, ANN VAC FAN 2B & SUCT FCO, spring returns to A-P AUTO from the START and STOP positions.

[1]	ENSURE Fan 2-FAN-65-74, EGTS CNTMT ANN VAC FAN 2B [757/A12V], is OFF.	
[2]	<b>PLACE</b> Handswitch 2-HS-65-74A, ANN VAC FAN 2B & SUCT FCO [0-M-27B], to STOP, <b>AND</b>	
	<b>VERIFY</b> Fan 2-FAN-65-74, EGTS CNTMT ANN VAC FAN 2B, is OFF.	
[3]	<b>VERIFY</b> Damper 2-FCO-65-74, EGTS CNTMT ANN VAC FAN 2B SUCT ISOLATION [757/A12V], is CLOSED.	
[4]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-74A, ANN VAC FAN 2B & SUCT FCO, are:	
	A. Green Light ON	
	B. Red Light OFF	
[5]	<b>VERIFY</b> the Red status light on Breaker 2-BKR-65-74, EGTS CNTMT ANN VAC FAN 2B (2-MTR-65-74), is OFF.	
[6]	<b>PLACE</b> Handswitch 2-HS-65-74A, ANN VAC FAN 2B & SUCT FCO, to START, <b>AND</b>	
	<b>VERIFY</b> Fan 2-FAN-65-74, EGTS CNTMT ANN VAC FAN 2B, is ON.	
[7]	VERIFY Damper 2-FCO-65-74, EGTS CNTMT ANN VAC FAN 2B SUCT ISOLATION, is OPEN. (Acc Crit)	
[8]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-74A, ANN VAC FAN 2A & SUCT FCO, are:	
	A. Green Light OFF	
	B. Red Light ON	

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6.2.3	2-FAN	N-65-74 Manual Operation and Controls (continued)	
	[9]	<b>VERIFY</b> the Red status light on Breaker 2-BKR-65-74, EGTS CNTMT ANN VAC FAN 2B (2-MTR-65-74), is ON.	
	[10]	PLACE Handswitch 2-HS-65-74A, ANN VAC FAN 2B & SUC FCO, to STOP, AND	Т
		<b>VERIFY</b> Fan 2-FAN-65-74, EGTS CNTMT ANN VAC FAN 2E is OFF.	, 
	[11]	VERIFY Damper 2-FCO-65-74, EGTS CNTMT ANN VAC FAN 2B SUCT ISOLATION, is CLOSED. (Acc Crit)	
	[12]	PRESS the START pushbutton on Handswitch 2-HS-65-74B, EGTS CNTMT ANN VAC FAN 2B SUCT ISOL DMPR [0-JB-292-1165, 757/A12V], AND	
		<b>VERIFY</b> Fan 2-FAN-65-74, EGTS CNTMT ANN VAC FAN 2E is ON.	<b>3</b> ,
	[13]	<b>PRESS</b> the STOP pushbutton on Handswitch 2-HS-65-74B, EGTS CNTMT ANN VAC FAN 2B SUCT ISOL DMPR, <b>AND</b>	
		<b>VERIFY</b> Fan 2-FAN-65-74, EGTS CNTMT ANN VAC FAN 2E is OFF.	, 
	[14]	VERIFY successful completion of this Subsection 6.2.3.	

# EMERGENCY GAS TREATMENT SYSTEM LOGIC TEST

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	Data	Package: Page of Date	
6.2.4		tainment Annulus Vacuum Fans Start on Low Flow and Trip imulated ØA Containment Isolation Signal	
	[1]	PLACE the following breakers in OFF:	
		A. 2-BKR-65-77, EGTS CNTMT ANN VAC FAN 2A (2-FAN-65-77)	
		B. 2-BKR-65-74, EGTS CNTMT ANN VAC FAN 2B (2-MTR-65-74)	
	[2]	<b>LAND</b> the following wires in 0-JB-292-1165 to restore the low flow start signals:	
		A. Wire 13C3 on Terminal Block TD	
			1st
		- -	CV
		B. Wire 13C3 on Terminal Block TB	
			1st
			CV
	[3]	<b>PLACE</b> Breaker 2-BKR-65-77, EGTS CNTMT ANN VAC FAN 2A (2-FAN-65-77), in ON, <b>AND</b>	
		VERIFY Fan 2-FAN-65-77, EGTS CNTMT ANN VAC FAN 2A, is ON. (Acc Crit)	
	[4]	<b>WAIT</b> approximately one minute for Fan 2-FAN-65-77, EGTS CNTMT ANN VAC FAN 2A, to reach equilibrium flow, <b>THEN</b>	
		PLACE Breaker 2-BKR-65-74, EGTS CNTMT ANN VAC FAN 2B (2-MTR-65-74), in ON, AND	
		<b>VERIFY</b> Fan 2-FAN-65-74, EGTS CNTMT ANN VAC FAN 2B, is OFF.	

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	Data	Package: Page of D	ate
6.2.4		ainment Annulus Vacuum Fans Start on Low Flow and Trip imulated ØA Containment Isolation Signal (continued)	
	[5]	<b>PLACE</b> Breaker 2-BKR-65-77, EGTS CNTMT ANN VAC FAN 2A (2-FAN-65-77), in OFF, <b>THEN</b>	
		<b>WAIT</b> approximately two minutes for Fan 2-FAN-65-77, EGTS CNTMT ANN VAC FAN 2A, to coast down, <b>AND</b>	
		<b>VERIFY</b> Fan 2-FAN-65-74, EGTS CNTMT ANN VAC FAN 2B, is ON. <b>(Acc Crit)</b>	<del></del>
	[6]	<b>PLACE</b> Breaker 2-BKR-65-77, EGTS CNTMT ANN VAC FAN 2A (2-FAN-65-77), in ON, <b>AND</b>	
		<b>VERIFY</b> Fan 2-FAN-65-77, EGTS CNTMT ANN VAC FAN 2A, is OFF.	
	[7]	<b>PLACE</b> Handswitch 2-HS-65-77A, ANN VAC FAN 2A & SUCT FCO, to START, <b>AND</b>	
		<b>VERIFY</b> Fan 2-FAN-65-77, EGTS CNTMT ANN VAC FAN 2A, is ON.	
	[8]	VERIFY the following annunciator windows are CLEAR:	
		A. 0-XA-55-27B-233A, ANNULUS VAC FAN 2A FLOW LO	
		B. 0-XA-55-27B-234A, ANNULUS VAC FAN 2B FLOW LO	
	[9]	<b>ENSURE</b> that BOTH Fan 2-FAN-65-77, EGTS CNTMT ANN VAC FAN 2A, AND Fan 2-FAN-65-74, EGTS CNTMT ANN VAC FAN 2B, have been ON for at least 50 seconds.	
	[10]	PLACE and HOLD a handheld jumper in the rear panel of 2A1-A Control and Auxiliary Vent Board compartment 13C, between Terminal Point 22 (Wire M587) and Terminal Point 23	
		(Wire M587A), to simulate a low flow signal.	1st
			CV

# EMERGENCY GAS TREATMENT SYSTEM LOGIC TEST

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	Data	Package: Pa	age	_ of		Da	ıte
6.2.4					Start on Low Flow ion Signal (continu	-	
	[11]	VERIFY the	followin	g:			
					55-27B-233A, ANNU S. <b>(Acc Crit)</b>	ILUS VAC	
					Screen indicates 23 OW LO is in ALARM		
	[12]	Control and Terminal Po	Auxiliar int 22 (V	y Vent Board Vire M587) a	rom the rear panel o I compartment 13C, nd Terminal Point 23 flow signal reset.	between	
		(	.,,		non eignan recen		1st
							CV
	[13]	VERIFY the	followin	g:			
				ndow 0-XA-{ LO, is CLEA	55-27B-233A, ANNU .R.	ILUS VAC	
			.US VAC		Screen indicates 23 OW LO is in NORM		
	[14]	2B1-B Contr between Ter	ol and <i>A</i> rminal P	Auxiliary Ven	umper in the rear pa t Board compartmen M588) and Termina flow signal.	nt 13C,	
							1st 
							CV
	[15]	VERIFY the	followin	g:			
					55-27B-234A, ANNU S. <b>(Acc Crit)</b>	ILUS VAC	·
					Screen indicates 23 OW LO is in ALARM		

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#### EMERGENCY GAS TREATMENT SYSTEM LOGIC TEST

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	Data	Package: Page of	Date
6.2.4		ainment Annulus Vacuum Fans Start on Low Flow and Trip imulated ØA Containment Isolation Signal (continued)	
	[16]	<b>REMOVE</b> the handheld jumper from the rear panel of 2B1-B Control and Auxiliary Vent Board compartment 13C, between Terminal Point 22 (Wire M588) and Terminal Point 23 (Wire M588A), to simulate a low flow signal reset.	
			1st
			CV
	[17]	VERIFY the following:	
		A. Annunciator Window 0-XA-55-27B-234A, ANNULUS VAC FAN 2B FLOW LO, is CLEAR.	
		B. Unit 2 Alarm Events Display Screen indicates 234-A ANNULUS VAC FAN 2B FLOW LO is in NORMAL (Green).	
		CAUTION	
Work	in Solic	State Protection Cabinets 2-R-48 and 2-R-51 involves energize	d circuits.
	[18]	MOMENTARILY PLACE a handheld jumper at TB 629, between Terminal Point 5 (Wire 13CX) and Terminal Point 6 (Wire 13C16) in 2-R-48 to simulate a U2 Containment Isolation ØA signal initiation and reset, AND	-
		<b>VERIFY</b> Fan 2-FAN-65-77, EGTS CNTMT ANN VAC FAN 2A, is OFF. (Acc Crit)	 1st
	[19]	PLACE Handswitch 2-HS-65-77A, ANN VAC FAN 2A & SUCT FCO, to START, AND	CV
		<b>VERIFY</b> Fan 2-FAN-65-77, EGTS CNTMT ANN VAC FAN 2A, is OFF.	

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	Data	Package: Page of	Date
6.2.4		tainment Annulus Vacuum Fans Start on Low Flow and Trip imulated ØA Containment Isolation Signal (continued)	
	[20]	<b>PLACE</b> Handswitch 2-HS-65-77A, ANN VAC FAN 2A & SUCT FCO, to STOP, <b>AND</b>	
		<b>VERIFY</b> Fan 2-FAN-65-77, EGTS CNTMT ANN VAC FAN 2A, is OFF.	
	[21]	<b>PLACE</b> Handswitch 2-HS-65-77A, ANN VAC FAN 2A & SUCT FCO, to START, <b>AND</b>	
		<b>VERIFY</b> Fan 2-FAN-65-77, EGTS CNTMT ANN VAC FAN 2A, is ON.	-
	[22]	MOMENTARILY PLACE a handheld jumper at TB 629, between Terminal Point 5 (Wire 13CX) and Terminal Point 6 (Wire 13C16) in 2-R-51 to simulate a U2 Containment Isolation ØA signal initiation and reset, AND	
		<b>VERIFY</b> Fan 2-FAN-65-74, EGTS CNTMT ANN VAC FAN 2B, is OFF. <b>(Acc Crit)</b>	
			1st
			CV
	[23]	<b>PLACE</b> Handswitch 2-HS-65-74A, ANN VAC FAN 2B & SUCT FCO, to START, <b>AND</b>	
		<b>VERIFY</b> Fan 2-FAN-65-74, EGTS CNTMT ANN VAC FAN 2B, is OFF.	
	[24]	<b>PLACE</b> Handswitch 2-HS-65-74A, ANN VAC FAN 2B & SUCT FCO, to STOP, <b>AND</b>	
		<b>VERIFY</b> Fan 2-FAN-65-74, EGTS CNTMT ANN VAC FAN 2B, is OFF.	H
	[25]	<b>PLACE</b> Handswitch 2-HS-65-74A, ANN VAC FAN 2B & SUCT FCO, to START, <b>AND</b>	
		<b>VERIFY</b> Fan 2-FAN-65-74, EGTS CNTMT ANN VAC FAN 2B, is ON.	

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	Data	Paci	age: Page of		Date
6.2.4				ns Start on Low Flow and Tri Dation Signal (continued)	ip
	[26]	PL	ACE the following breaker	s in OFF:	
		A.	2-BKR-65-77, EGTS CN (2-FAN-65-77)	TMT ANN VAC FAN 2A	
		B.	2-BKR-65-74, EGTS CN (2-MTR-65-74)	TMT ANN VAC FAN 2B	

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	Data	a Package: Page of Date	
6.3		ves and Dampers Move to Safety Position on Unit 2 ulated Containment Isolation ØA	
6.3.1	Prel	liminary Actions	
	[1]	<b>VERIFY</b> prerequisites listed in Section 4.0 for SubSection 6.3 have been completed.	

#### CAUTION

Work in Solid State Protection Cabinets 2-R-48 and 2-R-51 involves energized circuits.

#### NOTE

Subsections 6.3.2 thru 6.3.9 may be performed in any order. Steps within these subsections must be performed in the order written.

#### EMERGENCY GAS TREATMENT SYSTEM LOGIC TEST

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	Data	Package: Page of Date	e
6.3.2	2-FC	V-65-5 Move to Safety Position	
	[1]	<b>ENSURE</b> Valve 2-FCV-65-5, CNTMT ANN VAC FANS SUCT [757/A12V], is OPEN, as indicated by status lights on Train A CISP 2-XX-55-6E, Window 80, FCV-65-5 [2-M-6], are:	
		A. Green Light OFF	
		B. Red Light ON	
	[2]	<b>VERIFY</b> Handswitch 2-HS-65-5, U2 ANN VAC FAN SUCT [0-M-27B], is in A AUTO.	
	[3]	<b>LIFT</b> Wire GBP5 from Terminal Point 10 on TB 629 in 2-R-48 to simulate a U2 Containment Isolation ØA signal initiation.	
		to difficulties a G2 domainment locidatem 27 ( digital limitation.	1st
			CV
	[4]	<b>VERIFY</b> status lights on Train A CISP 2-XX-55-6E, Window 80, FCV-65-5 are: <b>(Acc Crit)</b>	
		A. Green Light ON	
		B. Red Light OFF	
	[5]	<b>LAND</b> Wire GBP5 from Terminal Point 10 on TB 629 in 2-R-48 to simulate a U2 Containment Isolation $\emptyset$ A signal reset.	
			1st
			CV
	[6]	<b>VERIFY</b> status lights on Train A CISP 2-XX-55-6E, Window 80, FCV-65-5 are:	
		A. Green Light ON	
		B. Red Light OFF	

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	Data	Package: Page of Date	
6.3.3	2-FC	V-65-4 Move to Safety Position	
	[1]	<b>ENSURE</b> Valve 2-FCV-65-4, CNTM ANNULUS VAC FANS ISLN VLV [757/A12V], is OPEN, as indicated by status lights on Train B CISP 2-XX-55-6F, Window 80, FCV-65-4 [2-M-6], are:	
		A. Green Light OFF	
		B. Red Light ON	
	[2]	<b>VERIFY</b> Handswitch 2-HS-65-4, U2 ANN VAC FAN SUCT [0-M-27B], is in A AUTO.	
	[3]	LIFT Wire GBN5 from Terminal Point 10 on TB 629 in 2-R-51	
		to simulate a U2 Containment Isolation $\emptyset$ A signal initiation.	1st
			CV
	[4]	<b>VERIFY</b> status lights on Train B CISP 2-XX-55-6F, Window 80, FCV-65-4 are: (Acc Crit)	
		A. Green Light ON	
		B. Red Light OFF	
	[5]	<b>LAND</b> Wire GBN5 from Terminal Point 10 on TB 629 in 2-R-51 to simulate a U2 Containment Isolation ØA signal reset.	
			1st
			CV
	[6]	<b>VERIFY</b> status lights on Train B CISP 2-XX-55-6F, Window 80, FCV-65-4 are:	
		A. Green Light ON	
		B. Red Light OFF	

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	Data	Package: Page of	Date
6.3.4	2-FC	V-65-9 Move to Safety Position	
	[1]	ENSURE Valve 2-FCV-65-9, EGTS TRAIN A UNIT 2 SUCT ISOL [757/A12V], is CLOSED, as indicated by status lights or Handswitch 2-HS-65-9, EGTS TR-A U2 SUCT DMPR [0-M-27B], are:	1
		A. Green Light ON	
		B. Red Light OFF	
	[2]	<b>ENSURE</b> Handswitch 2-HS-65-9, EGTS TR-A U2 SUCT DMPR, is in A AUTO.	
	[3]	<b>INSTALL</b> a jumper at TB 637, between Terminal Point 1 (Wire GBF5) and Terminal Point 2 (Wire GBF6) in 2-R-48 to simulate a U2 Containment Isolation ØA signal initiation.	
		simulate a 02 Containment isolation DA signal initiation.	1st
			CV
	[4]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-9, EGTS TR-A U2 SUCT DMPR, are: <b>(Acc Crit)</b>	
		A. Green Light OFF	<u> </u>
		B. Red Light ON	
	[5]	<b>PLACE</b> Handswitch 2-HS-65-9, EGTS TR-A U2 SUCT DMPF to CLOSE, <b>AND</b>	₹,
		<b>VERIFY</b> status lights on Handswitch 2-HS-65-9, EGTS TR-A U2 SUCT DMPR, are:	
		A. Green Light ON	
		B. Red Light OFF	

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	Data	Package: Page of	Date
6.3.4	2-FC	V-65-9 Move to Safety Position (continued)	
	[6]	<b>PLACE</b> Handswitch 2-HS-65-9, EGTS TR-A U2 SUCT DMPF to A AUTO, <b>AND</b>	₹,
		<b>VERIFY</b> status lights on Handswitch 2-HS-65-9, EGTS TR-A U2 SUCT DMPR, are:	
		A. Green Light OFF	
		B. Red Light ON	
	[7]	<b>REMOVE</b> the jumper from TB 637, between Terminal Point 1 (Wire GBF5) and Terminal Point 2 (Wire GBF6) in 2-R-48 to simulate a U2 Containment Isolation $\varnothing$ A signal reset.	
			1st
			CV
	[8]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-9, EGTS TR-A U2 SUCT DMPR, are:	
		A. Green Light OFF	
		B. Red Light ON	
	[9]	<b>PLACE</b> Handswitch 2-HS-65-9, EGTS TR-A U2 SUCT DMPF to CLOSE, <b>AND</b>	₹,
		<b>VERIFY</b> status lights on Handswitch 2-HS-65-9, EGTS TR-A U2 SUCT DMPR, are:	
		A. Green Light ON	
		B. Red Light OFF	

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	Data	Package: Page of	Date
6.3.5	2-FC	V-65-29 Move to Safety Position	
	[1]	<b>ENSURE</b> Valve 2-FCV-65-29, EGTS TRAIN B UNIT 2 SUCT ISOL [757/A12V], is CLOSED, as indicated by status lights on Handswitch 2-HS-65-29, EGTS TR-B U2 SUCT DMPR [0-M-27B], are:	
		A. Green Light ON	
		B. Red Light OFF	
	[2]	<b>ENSURE</b> Handswitch 2-HS-65-29, EGTS TR-B U2 SUCT DMPR, is in A AUTO.	<u></u>
	[3]	<b>INSTALL</b> a jumper at TB 637, between Terminal Point 1 (Wire GBK5) and Terminal Point 2 (Wire GBK6) in 2-R-51 to simulate a U2 Containment Isolation $\emptyset$ A signal initiation.	
		omalate a 92 containment residuol 27 tolgital illitiation.	1st
			CV
	[4]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-29, EGTS TR-B U2 SUCT DMPR, are: <b>(Acc Crit)</b>	
		A. Green Light OFF	
		B. Red Light ON	
	[5]	<b>PLACE</b> Handswitch 2-HS-65-29, EGTS TR-B U2 SUCT DMPR, to CLOSE, <b>AND</b>	
		<b>VERIFY</b> status lights on Handswitch 2-HS-65-29, EGTS TR-B U2 SUCT DMPR, are:	
		A. Green Light ON	
		B. Red Light OFF	

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6.3.5	2-FC	V-65-29 Move to Safety Position (continued)	
	[6]	<b>PLACE</b> Handswitch 2-HS-65-29, EGTS TR-B U2 SUCT DMPR, to A AUTO, <b>AND</b>	
		<b>VERIFY</b> status lights on Handswitch 2-HS-65-29, EGTS TR-EU2 SUCT DMPR, are:	}
		A. Green Light OFF	
		B. Red Light ON	
	[7]	<b>REMOVE</b> the jumper from TB 637, between Terminal Point 1 (Wire GBK5) and Terminal Point 2 (Wire GBK6) in 2-R-51 to simulate a U2 Containment Isolation $\emptyset$ A signal reset.	
			1st
			CV
	[8]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-29, EGTS TR-EU2 SUCT DMPR, are:	1
		A. Green Light OFF	
		B. Red Light ON	
	[9]	<b>PLACE</b> Handswitch 2-HS-65-29, EGTS TR-B U2 SUCT DMPR, to CLOSE, <b>AND</b>	
		<b>VERIFY</b> status lights on Handswitch 2-HS-65-29, EGTS TR-EU2 SUCT DMPR, are:	<b>3</b>
		A. Green Light ON	
		B. Red Light OFF	

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	Data	Package: Page of	Date
6.3.6	2-FC	O-65-46 Move to Safety Position	
	[1]	<b>ENSURE</b> Valve 2-FCO-65-46, EGTS TO U2 SHIELD BLDG [757/A12V], is CLOSED, as indicated by status lights on Handswitch 2-HS-65-46, EGTS TO U2 SHIELD BLDG [0-M-27B], are:	
		A. Green Light ON	
		B. Red Light OFF	
	[2]	<b>ENSURE</b> Handswitch 2-HS-65-46, EGTS TO U2 SHIELD BLDG, is in A AUTO.	
	[3]	<b>INSTALL</b> a jumper at TB 630, between Terminal Point 1 (Wire GBM5) and Terminal Point 2 (Wire GBM6) in 2-R-48 to simulate a U2 Containment Isolation ØA signal initiation.	
		simulate a 02 Containment isolation ØA signal initiation.	1st
			CV
	[4]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-46, EGTS TO U2 SHIELD BLDG, are: <b>(Acc Crit)</b>	
		A. Green Light OFF	
		B. Red Light ON	
	[5]	<b>PLACE</b> Handswitch 2-HS-65-46, EGTS TO U2 SHIELD BLDG, to CLOSE, <b>AND</b>	
		VERIFY status lights on Handswitch 2-HS-65-46 are:	
		A. Green Light ON	
		B. Red Light OFF	**************************************
	[6]	<b>PLACE</b> Handswitch 2-HS-65-46, EGTS TO U2 SHIELD BLDG, to A AUTO, <b>AND</b>	
		VERIFY status lights on Handswitch 2-HS-65-46 are:	
		A. Green Light OFF	
		B. Red Light ON	

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	Data	Package: Page of	Date
6.3.6	2-FC	O-65-46 Move to Safety Position (continued)	
	[7]	<b>REMOVE</b> jumper from TB 630, between Terminal Point 1 (Wire GBM5) and Terminal Point 2 (Wire GBM6) in 2-R-48 to simulate a U2 Containment Isolation $\emptyset$ A signal reset.	
			1st
			CV
	[8]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-46, EGTS TO U2 SHIELD BLDG, are:	
		A. Green Light OFF	
		B. Red Light ON	
	[9]	<b>PLACE</b> Handswitch 2-HS-65-46, EGTS TO U2 SHIELD BLDG, to CLOSE, <b>AND</b>	
		VERIFY status lights on Handswitch 2-HS-65-46 are:	
		A. Green Light ON	
		B. Red Light OFF	

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6.3.7	2-FC	O-65-45 Move to Safety Position	
	[1]	<b>ENSURE</b> Valve 2-FCO-65-45, EGTS TO U2 SHIELD BLDG [757/A12V], is CLOSED, as indicated by status lights on Handswitch 2-HS-65-45, EGTS TO U2 SHIELD BLDG [0-M-27B], are:	
		A. Green Light ON	<del>-</del>
		B. Red Light OFF	
	[2]	<b>ENSURE</b> Handswitch 2-HS-65-45, EGTS TO U2 SHIELD BLDG, is in A AUTO.	
	[3]	<b>INSTALL</b> a jumper at TB 630, between Terminal Point 1 (Wire GBL5) and Terminal Point 2 (Wire GBL6) in 2-R-51 to simulate a U2 Containment Isolation $\emptyset$ A signal initiation.	
		simulate a 02 Containment isolation ØA signal initiation.	1st
			CV
	[4]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-45, EGTS TO U2 SHIELD BLDG, are: <b>(Acc Crit)</b>	
		A. Green Light OFF	
		B. Red Light ON	***************************************
	[5]	<b>PLACE</b> Handswitch 2-HS-65-45, EGTS TO U2 SHIELD BLDG, to CLOSE, <b>AND</b>	
		VERIFY status lights on Handswitch 2-HS-65-45 are:	
		A. Green Light ON	
		B. Red Light OFF	
	[6]	<b>PLACE</b> Handswitch 2-HS-65-45, EGTS TO U2 SHIELD BLDG, to A AUTO, <b>AND</b>	
		VERIFY status lights on Handswitch 2-HS-65-45 are:	
		A. Green Light OFF	
		B. Red Light ON	

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	Data	Package: Page of	Date
6.3.7	2-FC	O-65-45 Move to Safety Position (continued)	
	[7]	<b>REMOVE</b> jumper from TB 630, between Terminal Point 1 (Wire GBL5) and Terminal Point 2 (Wire GBL6) in 2-R-51 to simulate a U2 Containment Isolation $\emptyset$ A signal reset.	
			1st
			CV
	[8]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-45, EGTS TO U2 SHIELD BLDG, are:	
		A. Green Light OFF	
		B. Red Light ON	
	[9]	<b>PLACE</b> Handswitch 2-HS-65-45, EGTS TO U2 SHIELD BLDG, to CLOSE, <b>AND</b>	
		VERIFY status lights on Handswitch 2-HS-65-45 are:	
		A. Green Light ON	
		B. Red Light OFF	

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6.3.8	2-PC	V-65-81 and 2-PCV-65-86 Move to Safety Position	
	[1]	ENSURE Valves 2-PCV-65-81, EGTS UNIT 2 SHIELD BLDG EXHAUST VENT ISOL [ANN 834/AZ360], and 2-PCV-65-86, EGTS CNTMT ANNULUS ISOLATION [ANN 834/AZ360], are CLOSED, as indicated by status lights on Handswitch 2-HS-65-81/86, U2 EGTS-ANN ΔP CNTLR A ISOL [0-M-27B], are:	
		A. Green Light ON, 81	<del></del>
		B. Red Light OFF, 81	<del></del>
		C. Green Light ON, 86	
		D. Red Light OFF, 86	
	[2]	<b>VERIFY</b> Handswitch 2-HS-65-81/86, U2 EGTS-ANN $\Delta$ P CNTLR A ISOL, is in A AUTO.	
	[3]	MOMENTARILY PLACE a handheld jumper at TB 630, between Terminal Point 3 (Wire GBW4) and Terminal Point 4 (Wire GBW5) in 2-R-48 to simulate a U2 Containment Isolation ØA signal initiation and reset.	
		isolation 27 ( signal initiation and reset.	1st
			CV
	[4]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-81/86, U2 EGTS-ANN ΔP CNTLR A ISOL, are: <b>(Acc Crit)</b>	
		A. Green Light OFF, 81	
		B. Red Light ON, 81	
		C. Green Light OFF, 86	
		D. Red Light ON, 86	

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	Data	Pacl	kage: Page of	Date			
6.3.8		V-65 tinue	-81 and 2-PCV-65-86 Move to Safety Position				
	[5]		<b>ACE</b> Handswitch 2-HS-65-81/86, U2 EGTS-ANN ΔP TLR A ISOL, to CLOSE, <b>AND</b>				
		VE	RIFY status lights on Handswitch 2-HS-65-81/86 are:				
		A.	Green Light ON, 81				
		В.	Red Light OFF, 81				
		C.	Green Light ON, 86				
		D.	Red Light OFF, 86				

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	Data	Package: Page of Dat	e
6.3.9	2-PC	V-65-83 and 2-PCV-65-87 Move to Safety Position	
	[1]	ENSURE Valves 2-PCV-65-83, EGTS UNIT 2 SHIELD BLDG EXHAUST VENT ISOL [ANN 834/AZ360], and 2-PCV-65-87, EGTS CNTMT ANNULUS ISOLATION [ANN 834/AZ360], are CLOSED, as indicated by status lights on Handswitch 2-HS-65-83/87, U2 EGTS-ANN ΔP CNTLR B ISOL [0-M-27B], are:	
		A. Green Light ON, 83	
		B. Red Light OFF, 83	
		C. Green Light ON, 87	
		D. Red Light OFF, 87	
	[2]	<b>VERIFY</b> Handswitch 2-HS-65-83/87, U2 EGTS-ANN $\Delta P$ CNTLR B ISOL, is in A AUTO.	
	[3]	MOMENTARILY PLACE a handheld jumper at TB 630, between Terminal Point 3 (Wire GBX4) and Terminal Point 4 (Wire GBX5) in 2-R-51 to simulate a U2 Containment Isolation ØA signal initiation and reset.	
		iosiation 27 Cognat initiation and rooot.	1st
			CV
	[4]	<b>VERIFY</b> status lights on Handswitch 2-HS-65-83/87, U2 EGTS-ANN $\triangle P$ CNTLR B ISOL, are: <b>(Acc Crit)</b>	
		A. Green Light OFF, 83	
		B. Red Light ON, 83	
		C. Green Light OFF, 87	
		D. Red Light ON, 87	

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	Data	Package: Page of	Date
6.3.9		CV-65-83 and 2-PCV-65-87 Move to Safety Position tinued)	
	[5]	<b>PLACE</b> Handswitch 2-HS-65-83/87, U2 EGTS-ANN $\Delta P$ CNTLR B ISOL, to CLOSE, <b>AND</b>	
		VERIFY status lights on Handswitch 2-HS-65-83/87 are:	
		A. Green Light ON, 83	
		B. Red Light OFF, 83	
		C. Green Light ON, 87	
		D. Red Light OFF, 87	

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	Data	Pack	kage: Page of Date	<b>.</b>			
6.4	Conta	Emergency Gas Treatment Fans Start on Unit 2 Simulated Containment Isolation ØA					
6.4.1	Preli	nina	ry Actions				
	[1]		RIFY prerequisites listed in Section 4.0 for SubSection 6.4 re been completed.				
			CAUTION				
Work	in Solid	Stat	e Protection Cabinets 2-R-48 and 2-R-51 involves energized ci	rcuits.			
	[2]		SURE the following valves/dampers are OPEN, as icated by the status lights on their respective handswitches:				
		A.	2-FCV-65-9, EGTS TRAIN A UNIT 2 SUCT ISOL [757/A12V], indicated at 2-HS-65-9, EGTS TR-A U2 SUCT DMPR [0-M-27B]:				
			Green Light OFF				
			Red Light ON				
		B.	2-FCV-65-29, EGTS TRAIN B UNIT 2 SUCT ISOL [757/A12V], indicated at 2-HS-65-29, EGTS TR-B U2 SUCT DMPR [0-M-27B]:				
			Green Light OFF				
			Red Light ON				
		C.	2-FCO-65-46, EGTS TO U2 SHIELD BLDG [757/A12V], indicated at 2-HS-65-46, EGTS TO U2 SHIELD BLDG [0-M-27B]:				
			Green Light OFF				
			Red Light ON				

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	Data Pack	age: Pa	ige	of	Date _	
6.4.1	Prelimina	ry Actior	ns (conti	inued)		
	D.		d at 2-H	GTS TO U2 SHIELD BLDG [7: S-65-45, EGTS TO U2 SHIELI	<b>-</b> ·	
		• Gre	een Ligh	t OFF	_	
		• Re	d Light C	ON	-	
	E.	VENT IS CNTMT indicate	SOL [AN ANNUL	GTS UNIT 2 SHIELD BLDG E N 834/AZ360] and 2-PCV-65-8 US ISOLATION [ANN 834/AZ3 S-65-81/86, U2 EGTS-ANN ΔF	36, EGTS 360],	
		• Gre	een Ligh	t OFF, 81	_	
		• Re	d Light C	DN, 81	_	
		• Gre	een Ligh	t OFF, 86	_	
		• Re	d Light C	DN, 86	_	
	F.	VENT IS CNTMT indicate	SOL [AN ANNUL	GTS UNIT 2 SHIELD BLDG E IN 834/AZ360] and 2-PCV-65-ξ .US ISOLATION [ANN 834/AZ3 S-65-83/87, U2 EGTS-ANN ΔF	87, EGTS 360],	
		• Gre	een Ligh	t OFF, 83	_	
		• Re	d Light C	ON, 83	_	
		• Gre	een Ligh	t OFF, 87	_	
		• Re	d Light C	ON, 87	_	

### NOTE

1) Subsections 6.4.2 thru 6.4.3 may be performed in any order. Steps within these subsections must be performed in the order written.

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	Data	Package: Page of	Date
6.4.2	0-FA	N-65-23 Start on U2 Simulated ∅A	
	[1]	<b>RECORD</b> the as-found positions of Handswitch 0-HS-65-23A, EGTS FAN A & DISCH DMPR [0-M-27B], and its respective status lights:  Handswitch As-Found Position:	
		Green Light As-Found Status:	
		Red Light As-Found Status:	
	[2]	ENSURE Handswitch 0-HS-65-23A, EGTS FAN A & DISCH DMPR, is in A AUTO, AND	
		<b>VERIFY</b> status lights on Handswitch 0-HS-65-23A, EGTS FAN A & DISCH DMPR, are:	1
		A. Green Light ON	
		B. Red Light OFF	
	[3]	PLACE and HOLD a handheld jumper at TB 637, between Terminal Point 5 (Wire 4D3) and Terminal Point 6 (Wire 4D5) in 2-R-48 to simulate a U2 Containment Isolation ØA signal	
		initiation.	1st
			CV
	[4]	<b>VERIFY</b> status lights on Handswitch 0-HS-65-23A, EGTS FAN A & DISCH DMPR, are: <b>(Acc Crit)</b>	I
		A. Green Light OFF	
		B. Red Light ON	
	[5]	<b>REMOVE</b> handheld jumper from TB 637, between Terminal Point 5 (Wire 4D3) and Terminal Point 6 (Wire 4D5) in 2-R-48 to simulate a U2 Containment Isolation $\emptyset$ A signal reset.	
		To a summer to detail to the total total to the total total to the total	1st
			CV

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	Data	Package: Page of Date	
6.4.2	0-FA	N-65-23 Start on U2 Simulated ∅A (continued)	
	[6]	<b>VERIFY</b> status lights on Handswitch 0-HS-65-23A, EGTS FAN A & DISCH DMPR, are:	
		A. Green Light OFF	
		B. Red Light ON	
	[7]	<b>PLACE</b> Handswitch 0-HS-65-23A, EGTS FAN A & DISCH DMPR, to STOP, <b>AND</b>	
		<b>VERIFY</b> status lights on Handswitch 0-HS-65-23A, EGTS FAN A & DISCH DMPR, are:	
		A. Green Light ON	
		B. Red Light OFF	
	[8]	<b>RESTORE</b> Handswitch 0-HS-65-23A, EGTS FAN A & DISCH DMPR, and its respective status lights to their as-found position, as recorded in Step 6.4.2[1], <b>AND</b>	
		RECORD the as-left positions of Handswitch 0-HS-65-23A, EGTS FAN A & DISCH DMPR, and its respective status lights:	
		Handswitch As-Left Position:	
		Green Light As-Left Status:	
		Red Light As-Left Status:	

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	Data	Package: Page of Da	te
6.4.3	0-FA	N-65-42 Start on U2 Simulated ØA	
	[1]	<b>RECORD</b> the as-found positions of Handswitch 0-HS-65-42A, EGTS FAN B & DISCH DMPR [0-M-27B], and its respective status lights:	
		Handswitch As-Found Position:	
		Green Light As-Found Status:	
		Red Light As-Found Status:	
	[2]	<b>ENSURE</b> Handswitch 0-HS-65-42A, EGTS FAN B & DISCH DMPR, is in A AUTO, <b>AND</b>	
		<b>VERIFY</b> status lights on Handswitch 0-HS-65-42A, EGTS FAN B & DISCH DMPR, are:	
		A. Green Light ON	
		B. Red Light OFF	
	[3]	PLACE and HOLD a handheld jumper at TB 637, between Terminal Point 5 (Wire 4D3) and Terminal Point 6 (Wire 4D5) in 2-R-51 to simulate a U2 Containment Isolation ØA signal initiation.	
		indatori.	1st
			CV
	[4]	<b>VERIFY</b> status lights on Handswitch 0-HS-65-42A, EGTS FAN B & DISCH DMPR, are: <b>(Acc Crit)</b>	
		A. Green Light OFF	
		B. Red Light ON	
	[5]	<b>REMOVE</b> handheld jumper from TB 637, between Terminal Point 5 (Wire 4D3) and Terminal Point 6 (Wire 4D5) in 2-R-51 to simulate a U2 Containment Isolation $\emptyset$ A signal reset.	
		to simulate a 02 containment isolation wh signal reset.	1st
			CV

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	Data	Package: Page of Date	
6.4.3	0-FA	N-65-42 Start on U2 Simulated ØA (continued)	
	[6]	<b>VERIFY</b> status lights on Handswitch 0-HS-65-42A, EGTS FAN B & DISCH DMPR, are:	
		A. Green Light OFF	
		B. Red Light ON	
	[7]	<b>PLACE</b> Handswitch 0-HS-65-42A, EGTS FAN B & DISCH DMPR, to STOP, <b>AND</b>	
		<b>VERIFY</b> status lights on Handswitch 0-HS-65-42A, EGTS FAN B & DISCH DMPR, are:	
		A. Green Light ON	
		B. Red Light OFF	
	[8]	<b>RESTORE</b> Handswitch 0-HS-65-42A, EGTS FAN B & DISCH DMPR, and its respective status lights to their as-found position, as recorded in Step 6.4.3[1], <b>AND</b>	
		<b>RECORD</b> the as-left positions of Handswitch 0-HS-65-42A, EGTS FAN B & DISCH DMPR, and its respective status lights:	
		Handswitch As-Left Position:	
		Green Light As-Left Status:	
		Red Light As-Left Status:	

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	Data	Package: Page of	Date				
6.5	ICS Point Verification						
6.5.1	Preliminary Actions						
	[1]	<b>VERIFY</b> prerequisites listed in Section 4.0 for Subsection 6.5 have been completed.					

#### NOTE

1) Subsections 6.5.2 thru 6.5.4 may be performed in any order. Steps within these subsections must be performed in the order written.

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	Data	Date		
6.5.2	Valv	e, Da	mper, and Handswitch Position ICS Point Verification	
	[1]	EN	SURE the following handswitches are in OPEN:	
		A.	2-HS-65-46, EGTS TO U2 SHIELD BLDG [0-M-27B]:	
		B.	2-HS-65-45, EGTS TO U2 SHIELD BLDG [0-M-27B]:	
		C.	2-HS-65-7, EGTS FAN A U2 SUCT DMPR [0-M-27B]:	
		D.	2-HS-65-9, EGTS TR-A U2 SUCT DMPR [0-M-27B]:	
		E.	2-HS-65-29, EGTS TR-B U2 SUCT DMPR [0-M-27B]:	
		F.	2-HS-65-50, EGTS TR-B U2 SUCT DMPR [0-M-27B]:	
	[2]		<b>SURE</b> the following valves are OPEN, as indicated by the tus lights on their respective handswitches:	
		A.	2-PCV-65-81, EGTS UNIT 2 SHIELD BLDG EXHAUST VENT ISOL [834/AZ360] and 2-PCV-65-86, EGTS CNTMT ANNULUS ISOLATION [834/AZ360], indicated a 2-HS-65-81/86, U2 EGTS-ANN ΔP CNTLR A ISOL [0-M-27B]:	at
			Green Light OFF, 81	
			Red Light ON, 81	
			Green Light OFF, 86	
			Red Light ON. 86	

# EMERGENCY GAS TREATMENT SYSTEM LOGIC TEST

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	Data	Pack	rage: Page of	Date
6.5.2	Valve (conti		mper, and Handswitch Position ICS Point Verification d)	
		B.	2-PCV-65-83, EGTS UNIT 2 SHIELD BLDG EXHAUST VENT ISOL [834/AZ360] and 2-PCV-65-87, EGTS CNTMT ANNULUS ISOLATION [834/AZ360], indicated a 2-HS-65-83/87, U2 EGTS-ANN ΔP CNTLR B ISOL [0-M-27B]	t
			Green Light OFF, 83	
			Red Light ON, 83	
			Green Light OFF, 87	
			Red Light ON, 87	
	[3]	VEF	RIFY the following ICS points:	
		A.	FD2371, U-2 SHLD BLDG EXH DMPR displays OPEN.	
		В.	FD2023, U-2 SHLD BLDG EXH DMPR displays OPEN.	
		C.	HD2054, EGTS TR-A SUCT VLV SW displays OPEN.	· .
		D.	FD2017, EGTS TRAIN A UNIT 2 SUCT DMPR displays OPEN.	
		E.	FD2365, EGTS TRAIN B UNIT 2 SUCT DMPR displays OPEN.	
		F.	HD2020, EGTS TR-B SUCT VLV SW displays OPEN.	
		G:	PD2010, SHLD BLDG ISO DMPR displays NOT CLS.	
		Н.	PD2011, CNTMT ANNS ISO DMPR displays NOT CLS.	
		1.	PD2017, SHLD BLDG ISO DMPR displays NOT CLS.	
		J.	PD2018, CNTMT ANNS ISO DMPR displays NOT CLS.	
		K.	HD2019, EGTS TR-A HS-9A, AND -46A displays NOT AUT.	
		L.	HD2053, EGTS TR-B HS-45A, AND -29A displays NOT AUT.	

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	Data I	Pack	age: Page	of	Date				
6.5.2		e, Damper, and Handswitch Position ICS Point Verification tinued)							
		M.	FD2016, EGTS NOT CLOS.	TR-A UNIT 2 SUCT DMPR SW displays	<del></del>				
		N.	FD2364, EGTS displays NOT Cl	TRAIN B UNIT 2 SUCT DMPR SW LOS.					
		Ο.	FD2370, U-2 SH CLOS.	HLD BLDG EXH DMPR SW displays NO	Г 				
		P.	FD2022, U-2 SH CLOS.	HLD BLDG EXH DMPR SW displays NO	Γ				
		Q.	PD2009, SHLD8 CLOS.	&ANNS ISO DMPR SW displays NOT					
		R.	PD2016, SHLD8 CLS.	&ANNS ISO DMPR SW displays NOT					
	[4]	PLA	CE the following	handswitches to CLOSE:					
		A.	2-HS-65-46, EG	TS TO U2 SHIELD BLDG					
		B.	2-HS-65-45, EG	TS TO U2 SHIELD BLDG					
		C.	2-HS-65-7, EGT	S FAN A U2 SUCT DMPR					
		D.	2-HS-65-9, EGT	S TR-A U2 SUCT DMPR					
		E.	2-HS-65-29, EG	TS TR-B U2 SUCT DMPR					
		F.	2-HS-65-50, EG	TS TR-B U2 SUCT DMPR	445				
		G.	2-HS-65-81/86,	U2 EGTS-ANN ΔP CNTLR A ISOL					
		H.	2-HS-65-83/87,	U2 EGTS-ANN ∆P CNTLR B ISOL					
	[5]	VEF	RIFY the following	g ICS points:					
		A.	FD2371, U-2 SH OPE.	ILD BLDG EXH DMPR displays NOT	•				
		B.	FD2023, U-2 SH OPE.	HLD BLDG EXH DMPR displays NOT					
		C.	HD2054, EGTS	TR-A SUCT VLV SW displays NOT OPE					

#### EMERGENCY GAS TREATMENT SYSTEM LOGIC TEST

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	Data	Pack	age: Page	_ of	Date
6.5.2	Valve (cont				
		D.	FD2017, EGTS NOT OPE.	TRAIN A UNIT 2 SUCT DMPR displays	
		E.	FD2365, EGTS NOT OPE.	TRAIN B UNIT 2 SUCT DMPR displays	
		F.	HD2020, EGTS	S TR-B SUCT VLV SW displays NOT OPE	Ξ
		G.	PD2010, SHLD	BLDG ISO DMPR displays CLOSED.	
		Н.	PD2011, CNTN	MT ANNS ISO DMPR displays CLOSED.	
		I.	PD2017, SHLD	BLDG ISO DMPR displays CLOSED.	
		J.	PD2018, CNTN	IT ANNS ISO DMPR displays CLOSED.	
		K.	HD2019, EGTS AUT.	S TR-A HS-9A, AND -46A displays NOT	<del></del>
		L.	HD2053, EGTS AUT.	S TR-B HS-45A, AND -29A displays NOT	
		M.	FD2016, EGTS CLOSE.	S TR-A UNIT 2 SUCT DMPR SW displays	
		N.	FD2364, EGTS displays CLOS	S TRAIN B UNIT 2 SUCT DMPR SW E.	
		Ο.	FD2370, U-2 S CLOSE.	HLD BLDG EXH DMPR SW displays	
		P.	FD2022, U-2 S CLOSE.	HLD BLDG EXH DMPR SW displays	
		Q.	PD2009, SHLD	&ANNS ISO DMPR SW displays CLOSE	
		R.	PD2016, SHLD CLOSED.	&ANNS ISO DMPR SW displays	
	[6]	PL/	ACE the following	g handswitches to A AUTO:	
		A.	2-HS-65-9, EG	TS TR-A U2 SUCT DMPR	
		B.	2-HS-65-29, E0	GTS TR-B U2 SUCT DMPR	

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	Data	Pack	age: Page of	Date	_
6.5.2	Valve (cont	t Verification			
	[7]	VEI	RIFY the following ICS points:		
		A.	HD2019, EGTS TR-A HS-9A, AND -46A of AUT	lisplays NOT	
		B.	HD2053, EGTS TR-B HS-45A, AND -29A AUT	displays NOT	
	[8]	PL	ACE the following handswitches to CLOSE:		
		A.	2-HS-65-9, EGTS TR-A U2 SUCT DMPR		_
		B.	2-HS-65-29, EGTS TR-B U2 SUCT DMPF	٠	_
	[9]	PL/	ACE the following handswitches to A AUTO	:	
		A.	2-HS-65-46, EGTS TO U2 SHIELD BLDG	<u></u>	_
		В.	2-HS-65-45, EGTS TO U2 SHIELD BLDG	•	_
	[10]	VE	RIFY the following ICS points:		
		A.	HD2019, EGTS TR-A HS-9A, AND -46A of AUT.	lisplays NOT	
		B.	HD2053, EGTS TR-B HS-45A, AND -29A AUT.	displays NOT	
	[11]	PL/	ACE the following handswitches to A AUTO	:	
		A.	2-HS-65-9, EGTS TR-A U2 SUCT DMPR		_
		B.	2-HS-65-29, EGTS TR-B U2 SUCT DMPF	ξ	_
	[12]	VEI	RIFY the following ICS points:	•	
		A.	HD2019, EGTS TR-A HS-9A, AND -46A of AUTO.	lisplays A	
		В.	HD2053, EGTS TR-B HS-45A, AND -29A AUTO.	displays A	
	[13]		ACE Handswitch 2-HS-65-81/86, U2 EGTS- TLR A ISOL, to A AUTO.	-ANN ΔP	

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	Data	Package: Page of	Date
6.5.2		e, Damper, and Handswitch Position ICS Point Verification tinued)	·
	[14]	<b>VERIFY</b> ICS point HD2071, SHLD BLDG VENT&ANNS HS-81A, -83B displays NOT AUT.	
	[15]	<b>PLACE</b> Handswitch 2-HS-65-83/87, U2 EGTS-ANN $\Delta P$ CNTLR B ISOL, to A AUTO.	
	[16]	<b>PLACE</b> Handswitch 2-HS-65-81/86, U2 EGTS-ANN $\Delta$ P CNTLR A ISOL, to CLOSE.	
	[17]	VERIFY ICS point HD2071, SHLD BLDG VENT&ANNS HS-81A, -83B displays NOT AUT.	
	[18]	<b>PLACE</b> Handswitch 2-HS-65-81/86, U2 EGTS-ANN $\Delta P$ CNTLR A ISOL to A AUTO.	
	[19]	VERIFY ICS point HD2071, SHLD BLDG VENT&ANNS HS-81A, -83B displays AUTO.	

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	Unit 2		SYSTEM LOGIC TEST	Rev. 0000 Page 88 of 101		
	Data	Pack	kage: Page of	Date		
5.5.3	125V	DC	Power ICS Point Verification			
			NOTES			
1)			this section has a blown fuse indicator which tor section.	h must be oriented towards		
2)	Each fus		all be bagged and tagged for identification in	mmediately after removal from		
	[1]	PU	LL the following fuses:			
		A.	0-FU-236-3/A34, SHIELD BUILDING VEN VLV AND CONTAINMENT ANNULUS ISC	DLATION VLV,		
			TRAIN A [125V VIT BATT BD III, CKT A34	4] 1st		
				CV		
		B.	0-FU-236-3/A35, EMER GAS TREAT, TR SUCTION DAMPER [125V VIT BATT BD			
				1st 		
				CV		
		C.	0-FU-236-3/A36, UNIT 2 SHIELD BLDG E [125V VIT BATT BD III, CKT A36]	XH DAMPER B		
			•	1st		
				CV		
		D.	0-FU-236-4/A31, EGTS TRAIN B UNIT 2: [125V VIT BATT BD IV, CKT A31]	SUCTION DMP		
				1st		
				CV		
		E.	0-FU-236-4/A32, UNIT 2 SHIELD BLDG E [125V VIT BATT BD IV, CKT A32]	XH DMP A		
			[	1st		

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	Data	Pack	rage: Page of	Date
6.5.3	125V	DC I	Power ICS Point Verification (continued)	
		F.	0-FU-236-4/A34, SHIELD BLDG VENT ISOL VLV, CNTMT ANNU ISOL VLV [125V VIT BATT BD IV, CKT A34]	
			704]	1st
				CV
	[2]	VE	RIFY the following ICS points:	
		A.	FD2015, EGTS TR-A UNIT 2 SUCT DMPR displays PW OFF.	/R 
		В.	FD2363, EGTS TRAIN B UNIT 2 SUCT DMPR displays PWR OFF.	
		C.	FD2021, U-2 SHLD BLDG EXH DMPR displays PWR OFF.	
		D.	FD2369, U-2 SHLD BLDG EXH DMPR displays PWR OFF.	
		E.	PD2008, SHLD&ANNS ISO DMPR -81,86 DC PW displays PWR OFF.	
		F.	PD2015, SHLD&ANNS ISO DMPR -83,87 DC PW displays PWR OFF.	

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	Data	Pacl	kage:	Page _		of			Date _	
6.5.3	125\	/ DC	Powe	r ICS Po	oint \	Verifica	tion (continue	ed)		
	[3]	INS	STALL	the follo	owing	g fuses:				
		A.	VLV					ENT ISOLATIO ISOLATION VL		
			IIV						-	1st
									_	CV
		B.		J-236-3// CTION D			GAS TREAT,	TRAIN A UNIT	2	
									<del>-</del>	1st
									_	CV
		C.	0-FL	J-236-3/ <i>i</i>	A36,	UNIT 2	SHIELD BLD	G EXH DAMPE	RB	
									_	1st
									_	CV
		D.	0-FL	J-236-4/	A31,	EGTS	TRAIN B UNIT	2 SUCTION D	MP _	4 .
									_	1st
	_									CV
		E.	0-FL	J-236-4/ <i>i</i>	A32,	UNIT 2	SHIELD BLD	G EXH DMP A	_	1st
									_	CV
		F.					BLDG VENT	ISOL VLV,		O V
			CNI	MT ANN	אט וצ	OUL VL	/		_	1st
									-	CV
										CV

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	Data	Pack	kage: Page of	Date
6.5.3	125V	DC I	Power ICS Point Verification (continued)	
	[4]	VE	RIFY the following ICS points:	
		A.	FD2015, EGTS TR-A UNIT 2 SUCT DMPR displays PW ON.	/R 
		В.	FD2363, EGTS TRAIN B UNIT 2 SUCT DMPR displays PWR ON.	
		C.	FD2021, U-2 SHLD BLDG EXH DMPR displays PWR O	N
		D.	FD2369, U-2 SHLD BLDG EXH DMPR displays PWR O	N
		E.	PD2008, SHLD&ANNS ISO DMPR -81,86 DC PW displays PWR ON.	
		F.	PD2015, SHLD&ANNS ISO DMPR -83,87 DC PW displays PWR ON.	

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	Data	Pack	kage: Page of Da	ite
6.5.4	0-L-4	130 P	ower ICS Point and Alarm Verification	
	[1]	VEI	RIFY the following annunciator windows are CLEAR:	
		A.	0-XA-55-27B-230D, U2 PNL 0-L-430 TR-A PWR FAIL	
		B.	0-XA-55-27B-235D, U2 PNL 0-L-430 TR-B PWR FAIL	
	[2]	PL	ACE the following toggle switches in 0-L-430 [757/A7U] to OF	F:
		A.	Nest 2	
				CV
		B.	Nest 6	1st
				CV
	[3]	VE	RIFY the following ICS points:	
		A.	PD2006, SHLD BLDG VENT&ANNS DMPR -80, -88 displays PWR OFF.	
		B.	PD2013, SHLD BLDG VENT&ANNS DMPR -82,89 displays PWR OFF.	
	[4]	VE	RIFY the following:	
		A.	Annunciator Window 0-XA-55-27B-230D, U2 PNL 0-L-430 TR-A PWR FAIL, ALARMS (Acc Crit)	
		B.	Unit 2 Alarm Events Display Screen indicates 230-D, U2 PNL 0-L-430 TR-A PWR FAIL is in ALARM (Red)	
		C.	Annunciator Window 0-XA-55-27B-235D, U2 PNL 0-L-430 TR-B PWR FAIL, ALARMS (Acc Crit)	
		D.	Unit 2 Alarm Events Display Screen indicates 235-D, U2 PNL 0-L-430 TR-B PWR FAIL is in ALARM (Red)	

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	Data	Pacl	kage: Page of	Date		
6.5.4	0-L-4	30 P	ower ICS Point and Alarm Verification (continued)			
	[5]	PL	ACE the following toggle switches in 0-L-430 to ON:	Alarm Verification (continued)  Igle switches in 0-L-430 to ON:  1st CV 1st CV S points:  OG VENT&ANNS DMPR -80, -88  OG VENT&ANNS DMPR -82,89  W 0-XA-55-27B-230D, U2 PNL 0-L-430 CLEAR S Display Screen indicates 230-D, U2 PWR FAIL is in NORMAL (Green)		
		A.	Nest 2	1ct		
			,			
				CV		
		B.	Nest 6			
				1st		
				CV		
	[6]	VERIFY the following ICS points:				
		A.	PD2006, SHLD BLDG VENT&ANNS DMPR -80, -88 displays PWR ON.			
		B.	PD2013, SHLD BLDG VENT&ANNS DMPR -82,89 displays PWR ON.			
	[7]	VE	RIFY the following:			
		A.	Annunciator Window 0-XA-55-27B-230D, U2 PNL 0-L-43 TR-A PWR FAIL, is CLEAR	0		
		В.	Unit 2 Alarm Events Display Screen indicates 230-D, U2 PNL 0-L-430 TR-A PWR FAIL is in NORMAL (Green)			
		C.	Annunciator Window 0-XA-55-27B-235D, U2 PNL 0-L-43 TR-B PWR FAIL, is CLEAR	0		
		D.	Unit 2 Alarm Events Display Screen indicates 235-D, U2			

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Data Package: Page \_\_\_\_ of \_\_\_\_ Date 7.0 POST PERFORMANCE ACTIVITIES **ENSURE** the following valves/dampers are CLOSED: [1] 2-FCO-65-46, EGTS TO U2 SHIELD BLDG [757/A12V] B. 2-FCO-65-45, EGTS TO U2 SHIELD BLDG [757/A12V] C. 2-FCV-65-7, EGTS TRAIN A UNIT 2 SUCT ISOL [757/A12V] D. 2-FCV-65-9, EGTS TRAIN A UNIT 2 SUCT ISOL [757/A12V] E. 2-FCV-65-29, EGTS TRAIN B UNIT 2 SUCT ISOL [757/A12V] 2-FCV-65-50, EGTS TRAIN B UNIT 2 SUCT ISOL, [757/A12V] G. 2-PCV-65-81, EGTS UNIT 2 SHIELD BLDG EXHAUST VENT ISOL [834/AZ360] H. 2-PCV-65-83, EGTS UNIT 2 SHIELD BLDG EXHAUST VENT ISOL [834/AZ360] 2-PCV-65-86, EGTS CNTMT ANNULUS ISOLATION [834/AZ360] 2-PCV-65-87, EGTS CNTMT ANNULUS ISOLATION [834/AZ360] [2] **NOTIFY** the Unit 2 US/SRO of the test completion and system alignment. NOTIFY the Unit 1 US/SRO of the test completion and system [3] alignment.

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### 8.0 RECORDS

A. QA Records

Completed Test Package.

B. Non-QA Records

None

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# Appendix A (Page 1 of 1)

#### TEST PROCEDURES/INSTRUCTIONS REFERENCE REVIEW

	Data Package: Page of	Date
	NOTES	
1)	Additional copies of this table may be made as necessary.	
2)	Initial and date indicates review has been completed for impact.	

PROCEDURE/ INSTRUCTION	REVISION/CHANGES	IMPACT Yes/No	INITIAL AND DATE (N/A for no change)
FSAR Section 6.2.3 Table 6.2.3.2 Table 14.2-1, Sheets 41/42			
WBN2-65-4001			
2-TSD-65-1			
2-TSD-88-5			
2-PTI-065-02			
	77.00		

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# Appendix B (Page 1 of 1)

### **TEMPORARY CONDITION LOG**

	Data Package: Page of	Date
	NOTES	
1)	Additional copies of this table may be made as necessary.	
2)	These steps will be N/A'd if no temporary condition existed.	

ITEM	TEMPORARY CONDITION		PERFORMED	RETU	RETURNED TO NORMAL		
No.	DESCRIPTION	Step No.	Performed By/Date CV By/Date	Step No.	Returned By/Date CV By/Date		
				-			
-17.4							

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#### PERMANENT PLANT INSTRUMENTATION LOG

Data Package:	Page	of	Date

INSTRUMENT OR INSTRUMENT LOOP#	CAL DUE DATE			TATIVE	POST-TEST CAL DATE <sup>2</sup>	POST-TEST CALIBRATION ACCEPTABLE <sup>2</sup>	
		INIT/DATE	INIT/DATE	YES	NO	_	INITIAL/DATE
2-FS-65-91		NA			Х	NA	NA
2-FS-65-92		NA			X	NA	NA
2-LPP-65-80		NA			X	NA	NA
2-LPP-65-82		NA			Х	NA	NA
2-LPP-30-126	-	NA			X	NA	NA
2-LPP-30-127		NA			X	NA	NA

These items may be initialed and dated by personnel performing the task. Instrumentation NOT required to be filled and vented may be identified as Not Applicable. (NA)

<sup>&</sup>lt;sup>2</sup> May be identified as NA if instrument was NOT used to verify/record quantitative acceptance criteria data.

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Appendix D (Page 1 of 1) SWITCH LINEUP

Data Package:	Page _	of	Date
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SWITCH UNID	LOCATION	DESCRIPTION	POSITION	INITIALS
2-HS-65-5	0-M-27B	U2 ANN VAC FAN SUCT	CLOSE	
2-HS-65-4	0-M-27B	U2 ANN VAC FAN SUCT	CLOSE	
2-HS-65-9	0-M-27B	EGTS TRAIN A UNIT 2 SUCT ISOL	CLOSE	
2-HS-65-29	0-M-27B	EGTS TRAIN B UNIT 2 SUCT ISOL	CLOSE	
2-HS-65-46	0-M-27B	EGTS TO U2 SHIELD BLDG	CLOSE	
2-HS-65-45	0-M-27B	EGTS TO U2 SHIELD BLDG	CLOSE	
2-HS-65-81/86	0-M-27B	U2 EGTS-ANN ΔP CNTLR A ISOL	CLOSE	
2-HS-65-83/87	0-M-27B	U2 EGTS-ANN ΔP CNTLR B ISOL	CLOSE	
2-HS-65-7	0-M-27B	EGTS FAN A U2 SUCT DMPR	CLOSE	
2-HS-65-50	0-M-27B	EGTS TR-B U2 SUCT DMPR	CLOSE	
2-HS-65-95	0-JB-292-1165, 757/A12V	EGTS CNTMT ANN VAC FANS PURGE ISOL DMPR	CLOSE return to AUTO	
2-HS-65-96	0-JB-292-1165, 757/A12V	EGTS CNTMT ANN VAC FANS PURGE ISOL DMPR	CLOSE return to AUTO	
2-HS-65-77A	0-M-27B	ANN VAC FAN 2A & SUCT FCO	A-P AUTO	
2-HS-65-74A	0-M-27B	ANN VAC FAN 2B & SUCT FCO	A-P AUTO	

#### EMERGENCY GAS TREATMENT SYSTEM LOGIC TEST

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# Appendix E (Page 1 of 2) ELECTRICAL LINEUP

Data Package:	Page	of	Date

#### **NOTE**

Each fuse in this table has a blown fuse indicator which must be oriented towards the annunciator circuit.

BREAKER/FUSE UNID	LOCATION	DESCRIPTION	POSITION	INITIALS
2-BKR-65-77	480V C&A Vent Bd 2A1-A Compt 13C	EGTS CNTMT ANN VAC FAN 2A (2-FAN-65-77)	OFF	
2-BKR-65-74	480V C&A Vent Bd 2B1-B Compt 13C	EGTS CNTMT ANN VAC FAN 2B (2-MTR-65-74)	OFF	
2-BKR-235-1/11	120V VIPB 2-I, BKR 11	AUX RELAY RACK A BUS TO PNL 2-R-75	ON	
2-BKR-235-2/9	120V VIPB 2-II, BKR 9	AUX RELAY RACK B BUS TO PNL 2-R-75	ON	
1-BKR-235-1/19	120V VIPB 1-I, BKR 19	GAS TREATMENT FAN A-A PANEL 0-L-429	ON	
1-BKR-235-2/19	120V VIPB 1-II, BKR 19	GAS TREATMENT FAN B-B PANEL 0-L-428	ON	
1-BKR-235-3/36	120V VIPB 1-III BKR 36	FLUID DYNAMIC FLOW SENSORS	ON	
0-FU-236-3/D11	125V VIT BATT BD III, CKT D11	CONTAINMENT ANNULUS VACUUM FANS PURGE ISOLATION DAMPER	INSTALLED	
0-FU-236-3/A33	125V VIT BATT BD III, CKT A33	EGTS TRAIN B UNIT 2 SUCTION VLV	INSTALLED	
0-FU-236-3/A34	125V VIT BATT BD III, CKT A34	SHIELD BUILDING VENT ISOLATION VLV AND CONTAINMENT ANNULUS ISOLATION VLV, TRAIN A	INSTALLED	

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### Appendix E (Page 2 of 2) ELECTRICAL LINEUP

Data Package:	Page	_ of	Date
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BREAKER/FUSE UNID	LOCATION	DESCRIPTION	POSITION	INITIALS
0-FU-236-3/A35	125V VIT BATT BD III, CKT A35	EMER GAS TREAT, TRAIN A UNIT 2 SUCTION DAMPER	INSTALLED	
0-FU-236-3/A36	125V VIT BATT BD III, CKT A36	UNIT 2 SHIELD BLDG EXH DAMPER B	INSTALLED	
0-FU-236-3/39	125V VIT BATT BD III, CKT A39	CONTAINMENT ANNULUS VACUUM FANS ISOL DAMPER	INSTALLED	
0-FU-236-4/D17	125V VIT BATT BD IV, CKT D17	CNTMT ANNULUS VACUUM FANS PURGE ISOL DMP	INSTALLED	
0-FU-236-4/A31	125V VIT BATT BD IV, CKT A31	EGTS TRAIN B UNIT 2 SUCTION DMP	INSTALLED	
0-FU-236-4/A32	125V VIT BATT BD IV, CKT A32	UNIT 2 SHIELD BLDG EXH DMP A	INSTALLED	
0-FU-236-4/A33	125V VIT BATT BD IV, CKT A33	EGTS TRAIN A UNIT 2 SUCTION VLV	INSTALLED	
0-FU-236-4/A34	125V VIT BATT BD IV, CKT A34	SHIELD BLDG VENT ISOL VLV, CNTMT ANNU ISOL VLV	INSTALLED	
0-FU-236-4/A39	125V VIT BATT BD IV, CKT A39	CNTMT ANNULUS VACUUM FANS ISOL DMP	INSTALLED	