

NUCLEAR ORGANIZATION:
UNITS 2 AND 3

OPERATING INSTRUCTION
REVISION 34
ATTACHMENT 2

SO23-2-13
PAGE 15 OF 174

DIESEL GENERATOR OPERATION
CONTINUOUS USE

05
36002 Run
Common Cause

OBJECTIVE:

Provide direction to perform Emergency Diesel Generator (D/G) runs. Sections are provided to start, raise speed to specified frequency and voltage, load the D/G, run loaded maintaining normal operating parameters, and secure the D/G. Individual sections may be used to support Post-Maintenance Testing and other D/G starts or runs. This attachment DOES NOT document Tech. Spec. Surveillance Acceptance Criteria. (LS-11.0)

UNIT 3 MODE 1 DG NO. 6002 DATE 8-20-08 TIME 1036

1.0 PREREQUISITES

PERF. BY
INITIALS

- 1.1 Verify this document is current by checking a controlled copy or by using the method described in SO123-VI-0.9.

(b)(6)

NOTE

Steps performed by Field Operators are identified by an *f*.

- 1.2 The Opposite Train D/G is NOT paralleled with the preferred offsite source. (LS-6.1)

(b)(6)

- 1.3 Reason attachment is initiated:

✓	REASON
	Post Maintenance Test: WAR#
✓	Start Verification
	EOIs
	Unloading and/or Stopping the Diesel Generator
	Other (specify):

- 1.4 Ensure Switchyard evolutions in progress or planned, will not conflict with Diesel Generator Operation. (LS-6.6)

(b)(6)

CSO

1.0 PREREQUISITES (Continued)

PERF. BY
INITIALS

(b)(6)

- 1.5 Determine the performance requirements of this attachment:
(LS-11.0)

✓	DIESEL GENERATOR OPERATION	PERFORM SECTION(S)
✓	Prestart Requirements	2.2 (pages 22 to 26)
✓	Diesel Generator Start	2.3 (pages 27 to 30)
✓	Synchronizing and Loading the Diesel Generator	2.4 (pages 31 to 33)
✓	Re-aligning Start Air System	2.5 (page 34 to 35)
	Paralleling a Diesel Supplied Bus to the RAT	2.6 (page 36)
	Paralleling a Diesel Supplied Bus to the UAT	2.7 (page 37)
✓	Unloading the Diesel Generator	2.8 (page 38)
✓	Stopping the Diesel Generator	2.9 (pages 39 to 41)
✓	Post Run Actions	2.10 (pages 42 to 44)
✓	Logging Results of Diesel Generator Run	3.0 (page 45)

- 1.5.1 Mark N/A for the remaining unused Sections. (Mark N/A if all Sections will be performed.)

(b)(6)

- 1.6 Determine type of Start: (Mark N/A if not performing Section 2.3.)

✓	TYPE OF START	MARK N/A STEPS
✓	SLOW START	NONE
	LOCAL FAST START	2.3.2, 2.3.2.1, 2.3.7, 2.3.14, 2.3.14.1
	CONTROL ROOM OR SIAS START	2.3.1, 2.3.1.1, 2.3.2, 2.3.2.1, 2.3.7, 2.3.14, 2.3.14.1, 2.3.15, 2.3.15.1

- 1.7 If Diesel Control will remain in LOCAL for duration of run, then Mark N/A Sections 2.3.15 and 2.9.1. (Mark N/A if Diesel Control will NOT remain in LOCAL.)

N/A

1.0 PREREQUISITES (Continued)

PERF. BY
INITIALS

- 1.8 Determine if start is to be timed. (Mark N/A Section 1.8 and Step 2.10.2 if not performing Section 2.3.)

(b)(6)

✓	DG START TO BE TIMED?
	YES: Request the Maintenance Department to install temporary recording equipment monitoring parameters required for Diesel Start, and request this alteration be documented per SO123-II-15.3.
✓	NO: Mark N/A Step 1.8.1, Sections 2.3.16, and 2.3.17, and Step 2.10.2

- 1.8.1 Name of Maintenance Department person contacted:

N/A

Person Contacted

Date

Time

- 1.9 Determine if Diesel will be operated at 450 RPM for duration of run: (Mark N/A if not performing Section 2.3.)

(b)(6)

✓	MARK N/A
	YES Steps 2.3.14, 2.3.14.1, 2.3.15, 2.3.15.1, and Section 2.9.2
✓	NO NONE

NOTE

It is preferred to reduce diesel speed to idle prior to stopping to minimize engine wear.

(b)(6)

- 1.10 Determine type of Diesel Generator Stop:

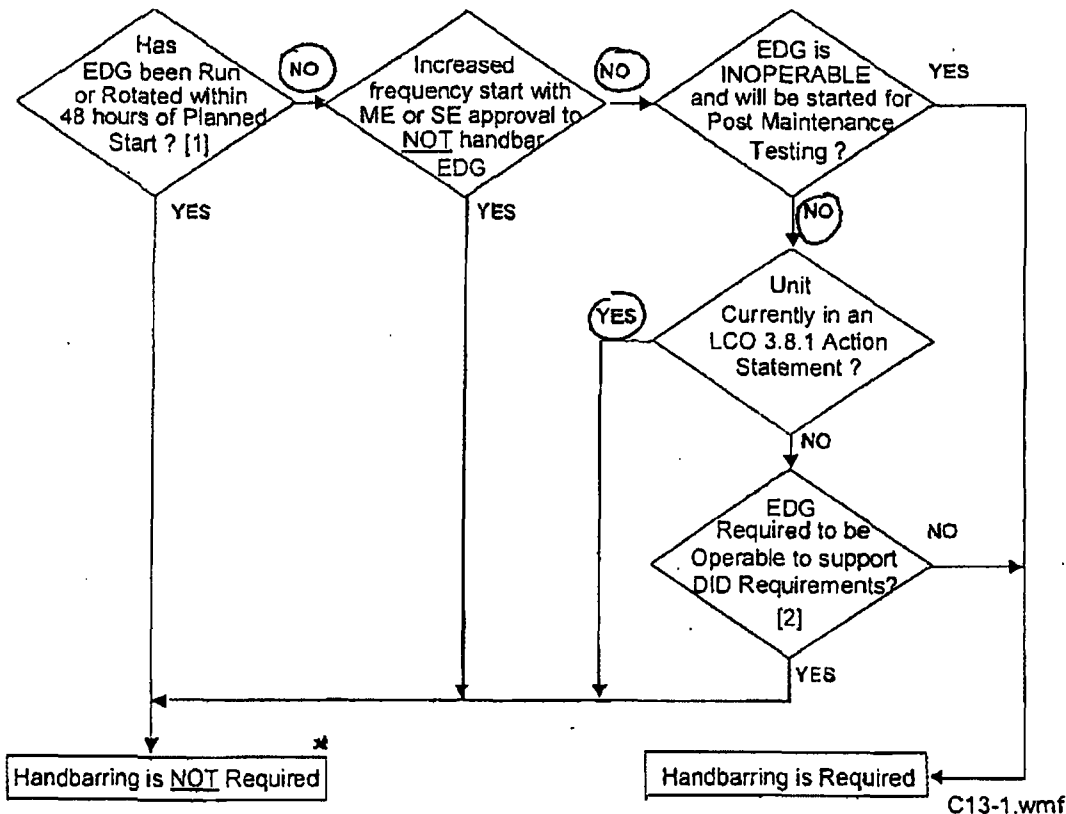
✓	TYPE OF STOP	MARK N/A
✓	LOCAL STOP FROM IDLE SPEED	Section 2.9.5
	LOCAL STOP FROM FAST SPEED	Sections 2.9.2 and 2.9.5, Steps 2.9.7.1 and 2.9.7.2
	CONTROL ROOM STOP	Sections 2.9.1, 2.9.2, 2.9.6, and 2.9.7

1.0 PREREQUISITES (Continued)

PERF. BY
INITIALS

(b)(6)

1.11 Determine if Handbarring is required:
(Mark N/A Section 1.11 if not performing Section 2.3.)



f 1.11.1 If required, then HANDBAR the Diesel Generator per Attachment 12 or 13. (Mark N/A if handbarring not required.)

N/A

[1] Rotation may be performed by either Operations or Maintenance.

[2] If the Diesel is AVAILABLE, can be started within Time to Boil requirements, and not required to be OPERABLE, then Select NO.
The Diesel remains AVAILABLE for DID during Handbarring.

1.0 PREREQUISITES (Continued)

PERF. BY
INITIALS

- 1.12 Determine if Unit 2 Diesel Generators are to be started during normal working hours (Monday-Friday from 0700-1600): (Mark N/A Section 1.12 if not performing Section 2.3.)

(b)(6)

☐ YES Request Facilities (PAX 83979 or 83333) to close fresh air dampers to D1N to minimize exhaust entering building.

☒ NO Mark N/A Step 1.12.1, and Section 2.10.8.

1.12.1 Name of Facilities Department person contacted:

N/A

Person Contacted

Date

Time

- 1.13 Determine which AVR is to be used as determined by the Red Book or other controlling document (e.g. Daily Production Package, WAR, etc.): (Mark N/A if not performing Section 2.2.) (AR 990601338-10) (LS-7.1, LS-7.5)

(b)(6)

✓	AVR	MARK N/A
	AVR A	Sections 2.2.6 and 2.2.7
✓	AVR B	Sections 2.2.5 and 2.2.7
	OFF	Sections 2.2.5 and 2.2.6

- 1.14 SELECT Air Start alignment as determined by the SRO Ops Supv. or controlling document (e.g. WAR, Red Book, Daily Production Package, etc.): (Mark N/A if not performing Section 2.2.) (LS-1.8)

(b)(6)

✓	SUBSYSTEM TO BE ALIGNED	MARK N/A SECTIONS
G002		
	BOTH	2.2.8, 2.2.9, 2.2.10, 2.2.11, 2.3.22, 2.5
	1	2.2.9, 2.2.10, 2.2.11, 2.5.2, 2.5.3, 2.5.4
✓	2	2.2.8, 2.2.10, 2.2.11, 2.5.1, 2.5.3, 2.5.4
G003		
	BOTH	2.2.8, 2.2.9, 2.2.10, 2.2.11, 2.3.22, 2.5
	1	2.2.8, 2.2.9, 2.2.11, 2.5.1, 2.5.2, 2.5.4
	2	2.2.8, 2.2.9, 2.2.10, 2.5.1, 2.5.2, 2.5.3

1.0 PREREQUISITES (Continued)

PERF. BY
INITIALS

- 1.15 Determine if Air Start Receiver Pressure Drop Monitoring is to be performed: (Mark N/A if not performing Section 2.2.)

(b)(6)

✓	MARK N/A	
SUBSYSTEM 1 TO BE TESTED?		
	YES	NONE
✓	NO	Steps 2.2.13, 2.2.15, 2.3.20, and 2.3.23
SUBSYSTEM 2 TO BE TESTED?		
	YES	NONE
✓	NO	Steps 2.2.14, 2.2.16, 2.3.21, and 2.3.24

- 1.16 Determine if measuring devices are to be installed to monitor/record Diesel Generator parameters. (Mark N/A if not performing Section 2.2.)

(b)(6)

✓	MEASURING DEVICES TO BE INSTALLED?	MARK N/A STEPS
	YES	NONE
✓	NO	2.2.12, 2.10.1

- 1.17 Verify all steps in Section 1.0 are complete, and all steps in Sections 1.0 and 2.0 required to be marked N/A as directed above, are correctly marked N/A.

(b)(6)

Supv.

END OF SECTION 1.0

18

2.0 PROCEDURE

2.1 Performance Guidelines

- 2.1.1 If the D/G needs to be secured and restarted rapidly during performance of this attachment, e.g. Hot Restart, then the initial standby actions do not need to be reperformed.
- 2.1.2 This attachment allows multiple starts/stops and loading/unloading of the Diesel, leave unused columns blank.

GUIDELINE

Due to Air Start System valve position tracking difficulties, separate copies of this attachment are required if testing involves various Air Start System alignments.

- 2.1.3 If required due to post-maintenance testing, then maintenance testing may be performed concurrently with this attachment at any time the Diesel is in a steady state condition (e.g. varying speed or adjusting Governor with the engine unloaded at 900 rpm). (LS-6.2, LS-6.3)
- .1 If maintenance testing requires unloading, stopping, or tripping the Diesel, then Mark N/A unused steps of the current start column.
- 2.1.4 If a valid Degraded Grid Voltage condition occurs with the D/G output breaker CLOSED, then initiate a controlled unloading of the D/G, and OPEN the output breaker. This is necessary to return the SDVS protection circuit to Automatic. (With the D/G output breaker closed, the SDVS circuit is defeated.)
- 2.1.5 If Diesel operation is planned for > 8 hours cumulative, then oil will need to be added to ensure level is ≥ FULL RUN Level.

END OF SECTION 2.1

2.0 PROCEDURE (Continued)

PERF. BY
INITIALS

2.2 Prestart Requirements



- f* 2.2.1 Ensure SO23-3-3.23, Attachment for Diesel Generator Standby Verification, has been performed and is up to date for this Diesel Inoperability.
- f* 2.2.2 RECORD PI-E938 (PI-E988), Engine No. 1 Auxiliary Turbocharger Filter Circ. Oil Outlet Pressure: (Ref. 2.3.1.6)
32 psig
- f* 2.2.3 RECORD PI-E937 (PI-E987), Engine No. 2 Auxiliary Turbocharger Filter Circ. Oil Outlet Pressure: (Ref. 2.3.1.6)
30 psig
- f* 2.2.4 Report Auxiliary Turbocharger Filter Circ. Oil Outlet Pressures to the Control Room. (LS-5.5)
- .1 If either pressure is ≤ 10 psig, then DO NOT START the Diesel without Maintenance Engineer concurrence. (Mark N/A if both engines > 10 psig.)

(b)(6)

N/A

Name of Maintenance Engineer	Date	Time
<i>f</i> 2.2.5 ENSURE HS-E941(HS-E991), VOLTAGE REGULATOR, selected to AVR A.		
<i>f</i> .1 VERIFY ILLUMINATED ZL-E921(ZL-E971), AVR A SELECTED.		
<i>f</i> 2.2.6 ENSURE HS-E941(HS-E991), VOLTAGE REGULATOR, selected to AVR B.		
<i>f</i> .1 VERIFY ILLUMINATED ZL-E922(ZL-E972), AVR B SELECTED.		
<i>f</i> 2.2.7 ENSURE HS-E941(HS-E991), VOLTAGE REGULATOR, selected to OFF.		
<i>f</i> .1 VERIFY EXTINGUISHED ZL-E921(ZL-E971), AVR A SELECTED.		
<i>f</i> .2 VERIFY EXTINGUISHED ZL-E922(ZL-E972), AVR B SELECTED.		

- f* 2.2.5 ENSURE HS-E941(HS-E991), VOLTAGE REGULATOR, selected to AVR A.
- f* .1 VERIFY ILLUMINATED ZL-E921(ZL-E971), AVR A SELECTED.
- f* 2.2.6 ENSURE HS-E941(HS-E991), VOLTAGE REGULATOR, selected to AVR B.
- f* .1 VERIFY ILLUMINATED ZL-E922(ZL-E972), AVR B SELECTED.
- f* 2.2.7 ENSURE HS-E941(HS-E991), VOLTAGE REGULATOR, selected to OFF.
- f* .1 VERIFY EXTINGUISHED ZL-E921(ZL-E971), AVR A SELECTED.
- f* .2 VERIFY EXTINGUISHED ZL-E922(ZL-E972), AVR B SELECTED.

N/A

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(b)(6)

N/A

↓

2.0 PROCEDURE (Continued)

PERF. BY
INITIALS

2.2.8 Use G002 Starting Air Subsystem 1 to start the Diesel.

- | | | |
|----------|----|--|
| <i>f</i> | .1 | ENSURE LOCKED OPEN S2(3)2420MU087, DG G002 Starting Air Subsystem #1 Air Receiver T335 Outlet Isolation Valve. |
| <i>f</i> | .2 | ENSURE LOCKED CLOSED S2(3)2420MU086, DG G002 Starting Air Subsys #1 T335 and Subsys #2 T336 Outlet Crosstie Valve. |
| <i>f</i> | .3 | ENSURE LOCKED OPEN S2(3)2420MU081, DG G002 Eng #2 (20 Cyl) Start Air Subsys #1 Right Bank Vlv HV5931A Inlet Iso. |
| <i>f</i> | .4 | ENSURE LOCKED OPEN S2(3)2420MU082, DG G002 Eng #1 (16 Cyl) Start Air Subsys #1 Left Bank Vlv HV5931B Inlet Iso. |
| <i>f</i> | .5 | UNLOCK and CLOSE S2(3)2420MU083, DG G002 Eng #1 (16 Cyl) Start Air Subsys #2 Right Bank Vlv HV5931D Inlet Iso. |
| <i>f</i> | .6 | UNLOCK and CLOSE S2(3)2420MU084, DG G002 Eng #2 (20 Cyl) Start Air Subsys #2 Left Bank Vlv HV5931C Inlet Iso. |
| <i>f</i> | .7 | UNLOCK and CLOSE S2(3)2420MU085, DG G002 Starting Air Subsystem #2 Air Receiver T336 Outlet Isolation Valve. |

N/A

END OF SECTION 2.2.8

2.0 PROCEDURE (Continued)

PERF. BY
INITIALS

2.2.9 Use G002 Starting Air Subsystem 2 to start the Diesel.

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|----------|----|--|
| <i>f</i> | .1 | ENSURE LOCKED OPEN S2(3)2420MU085, DG G002 Starting Air Subsystem #2 Air Receiver T336 Outlet Isolation Valve. |
| <i>f</i> | .2 | ENSURE LOCKED CLOSED S2(3)2420MU086, DG G002 Starting Air Subsys #1 T335 and Subsys #2 T336 Outlet Crosstie Valve. |
| <i>f</i> | .3 | ENSURE LOCKED OPEN S2(3)2420MU083, DG G002 Eng #1 (16 Cyl) Start Air Subsys #2 Right Bank Vlv HV5931D Inlet Iso. |
| <i>f</i> | .4 | ENSURE LOCKED OPEN S2(3)2420MU084, DG G002 Eng #2 (20 Cyl) Start Air Subsys #2 Left Bank Vlv HV5931C Inlet Iso. |
| <i>f</i> | .5 | UNLOCK and CLOSE S2(3)2420MU081, DG G002 Eng #2 (20 Cyl) Start Air Subsys #1 Right Bank Vlv HV5931A Inlet Iso. |
| <i>f</i> | .6 | UNLOCK and CLOSE S2(3)2420MU082, DG G002 Eng #1 (16 Cyl) Start Air Subsys #1 Left Bank Vlv HV5931B Inlet Iso. |
| <i>f</i> | .7 | UNLOCK and CLOSE S2(3)2420MU087, DG G002 Starting Air Subsystem #1 Air Receiver T335 Outlet Isolation Valve. |

(b)(6)

END OF SECTION 2.2.9

2.0 PROCEDURE (Continued)

PERF. BY
INITIALS

2.2.10 Use G003 Starting Air Subsystem 1 to start the Diesel.

- | | | |
|----------|----|--|
| <i>f</i> | .1 | ENSURE LOCKED OPEN S2(3)2420MU096, DG G003 Starting Air Subsystem #1 Air Receiver T337 Outlet Isolation Valve. |
| <i>f</i> | .2 | ENSURE LOCKED CLOSED S2(3)2420MU095, DG G003 Starting Air Subsys #1 T337 and Subsys #2 T338 Outlet Crosstie Valve. |
| <i>f</i> | .3 | ENSURE LOCKED OPEN S2(3)2420MU109, DG G003 Eng #2 (20 Cyl) Start Air Subsys #1 Right Bank Vlv HV5931E Inlet Iso. |
| <i>f</i> | .4 | ENSURE LOCKED OPEN S2(3)2420MU110, DG G003 Eng #1 (16 Cyl) Start Air Subsys #1 Left Bank Vlv HV5931F Inlet Iso. |
| <i>f</i> | .5 | UNLOCK and CLOSE S2(3)2420MU111, DG G003 Eng #1 (16 Cyl) Start Air Subsys #2 Right Bank Vlv HV5931H Inlet Iso. |
| <i>f</i> | .6 | UNLOCK and CLOSE S2(3)2420MU112, DG G003 Eng #2 (20 Cyl) Start Air Subsys #2 Left Bank Vlv HV5931G Inlet Iso. |
| <i>f</i> | .7 | UNLOCK and CLOSE S2(3)2420MU094, DG G003 Starting Air Subsystem #2 Air Receiver T338 Outlet Isolation Valve. |

N/A

END OF SECTION 2.2.10

2.0 PROCEDURE (Continued)

PERF. BY
INITIALS

- | | | | |
|----------|--------|--|------------|
| | 2.2.11 | Use G003 Starting Air Subsystem 2 to start the Diesel. | |
| <i>f</i> | .1 | ENSURE LOCKED OPEN S2(3)2420MU094, DG G003 Starting Air Subsystem #2 Air Receiver T338 Outlet Isolation Valve. | <u>N/A</u> |
| <i>f</i> | .2 | ENSURE LOCKED CLOSED S2(3)2420MU095, DG G003 Starting Air Subsys #1 T337 and Subsys #2 T338 Outlet Crosstie Valve | |
| <i>f</i> | .3 | ENSURE LOCKED OPEN S2(3)2420MU111, DG G003 Eng #1 (16 Cyl) Start Air Subsys #2 Right Bank Vlv HV5931H Inlet Iso. | |
| <i>f</i> | .4 | ENSURE LOCKED OPEN S2(3)2420MU112, DG G003 Eng #2 (20 Cyl) Start Air Subsys #2 Left Bank Vlv HV5931G Inlet Iso. | |
| <i>f</i> | .5 | UNLOCK and CLOSE S2(3)2420MU109, DG G003 Eng #2 (20 Cyl) Start Air Subsys #1 Right Bank Vlv HV5931E Inlet Iso. | |
| <i>f</i> | .6 | UNLOCK and CLOSE S2(3)2420MU110, DG G003 Eng #1 (16 Cyl) Start Air Subsys #1 Left Bank Vlv HV5931F Inlet Iso. | |
| <i>f</i> | .7 | UNLOCK and CLOSE S2(3)2420MU096, DG G003 Starting Air Subsystem #1 Air Receiver T337 Outlet Isolation Valve. | |
| | 2.2.12 | Request Maintenance to ensure all required test equipment is installed, and pretests have been performed on the measuring devices installed to monitor/record Diesel Generator parameters. | <u>N/A</u> |
| | | VERIFIED BY: | |
| | | Maintenance General Foreman | Date |
| | | | Time |
| <i>f</i> | 2.2.13 | PLACE C-012A (C-013A), Starting Air Compressor Power Supply Handswitch, at BDX-09 (BHX-09) to OFF. | <u>N/A</u> |
| <i>f</i> | 2.2.14 | PLACE C-012B (C-013B), Starting Air Compressor Power Supply Handswitch, at BDX-10 (BHX-10) to OFF. | <u>N/A</u> |
| <i>f</i> | 2.2.15 | RECORD Subsystem #1 Prestart Air Start Manifold pressure:
_____ PI-5958B(D) | <u>N/A</u> |
| <i>f</i> | 2.2.16 | RECORD Subsystem #2 Prestart Air Start Manifold pressure:
_____ PI-5958A(C) | <u>N/A</u> |

2.0 PROCEDURE (Continued)

2.3 Diesel Generator Start

CALL

1648

		PERF. BY INITIALS START 1	PERF. BY INITIALS START 2	PERF. BY INITIALS START 3	PERF. BY INITIALS START 4
2.3.1	TRANSFER HS-1665-1(HS-1644-2), MODE SELECTOR, to LOCAL CONTROL at CR-63.	(b)(6)			
<i>f</i> .1	VERIFY ILLUMINATED ZL-E918 (ZL-E968), LOCAL CONTROL light. [L-160(L-161)]				
<i>f</i> 2.3.2	DEPRESS HS-1701A(B), IDLE SPEED ON pushbutton. [L-160(L-161)]				
<i>f</i> .1	VERIFY ILLUMINATED ZL-1700A(B), IDLE SPEED light. [L-160(L-161)]				
2.3.3	START the Diesel Generator and RECORD time. (LS-5.4)				
	Start Time: 1649				
.1	If the D/G fails to start, <u>then</u> refer to Attachment 7. (Ref. 2.2.1) (LS-1.7)	(b)(6)			
<i>f</i> 2.3.4	VERIFY all Air Start Motors have Disengaged.				
<i>f</i> .1	If any Air Start Motor has NOT Disengaged, <u>then</u> IMMEDIATELY SECURE the D/G, <u>and</u> notify the Control Room of this condition.				
<i>f</i> 2.3.5	If the Diesel Generator exhibits "hunting" as indicated by large swings in the fuel rack position, speed, and/or engine loading, <u>then</u> refer to Attachment 7. (LS-5.7)				

2.0 PROCEDURE (Continued)

2.3 Diesel Generator Start

		PERF. BY INITIALS START 1	PERF. BY INITIALS START 2	PERF. BY INITIALS START 3	PERF. BY INITIALS START 4
f 2.3.6	RECORD Diesel Generator Lube Oil Pressure: Engine No. 1: <u>104</u> [>25 psig] (PI-5991B, D) Engine No. 2: <u>103</u> [>25 psig] (PI-5991A, C)	(b)(6)			
2.3.7	RUN at idle speed (~450 rpm) 5 to 10 minutes for warmup, or as needed for testing. (LS-6.3)				
f 2.3.8	If required to shutdown the Diesel from 450 rpm, then SECURE the Diesel per Section 2.9, and REALIGN the Start Air system per Section 2.5.				
f 2.3.9	LOCALLY VERIFY STARTED E-550 (E-549), Diesel Radiator Fan.	(b)(6)			
f 2.3.10	LOCALLY VERIFY STARTED E-546 (E-547), Diesel Radiator Fan.				
2.3.11	VERIFY STARTED A-274 (A-276), D/G Building Emergency Ventilation Fan. (Ref. 2.3.1.2)				
2.3.12	VERIFY STARTED A-275 (A-277), D/G Building Emergency Ventilation Fan. (Ref. 2.3.1.2)				
f 2.3.13	Ensure desired AVR is Selected, per SRO Ops. Supv. direction.				
	AVR (Circle one.)	A <input checked="" type="radio"/> B NONE	A B NONE	A B NONE	A B NONE
	NOTE: 159/81, Volts per Cycle Relay, may drop during transfers between idle speed and rated speed, and windows 63B19(63C19) and/or 63B29(63C29) may annunciate. (AR 021101161, AR 070100987)				

2.0 PROCEDURE (Continued)

2.3 Diesel Generator Start

		PERF. BY INITIALS START 1	PERF. BY INITIALS START 2	PERF. BY INITIALS START 3	PERF. BY INITIALS START 4
<i>f</i> 2.3.14	Following the warmup period, or as needed for testing, RAISE DIESEL SPEED to 900 rpm by DEPRESSING HS-1702A(B), IDLE SPEED OFF. [L-160(L-161)] (LS-6.2, LS-7.2)	(b)(6)			
<i>f</i> .1	VERIFY EXTINGUISHED ZL-1700A(B), IDLE SPEED light. [L-160(L-161)]				
2.3.15	DEPRESS HS-1665-1(HS-1644Z), MODE SELECTOR, LOCAL CONTROL pushbutton at CR-63 to transfer Diesel Control to the Control Room. (Mark N/A if not transferring to Control Room at this time.)				
<i>f</i> .1	VERIFY EXTINGUISHED ZL-E918 (ZL-E968), LOCAL CONTROL light. (Mark N/A if not transferring to Control Room at this time.)				
2.3.16	Time required to reach 4.224 kV: _____ seconds (Ref. 2.3.3.1) Performed by: _____ Electrical Test	N/A			
2.3.17	Time required to reach 59.76 HZ: _____ seconds (Ref. 2.3.3.1) Performed by: _____ Electrical Test	N/A			
<i>f</i> 2.3.18	VERIFY air blowing from S2(3)2420MU302 [S2(3)2420MU304], Diesel Generator G002(3) Engine #1 (16 CYL) Airbox Drain Valve.	(b)(6)			
<i>f</i> .1	If Air is not blowing from the Air Box Drain S2(3)2420MU302 [S2(3)2420MU304], <u>then</u> THROTTLE OPEN the drain valve until air is blowing from drain.				
<i>f</i> 2.3.19	VERIFY air blowing from S2(3)2420MU301 [S2(3)2420MU303], Diesel Generator G002(3) Engine #2 (20 CYL) Airbox Drain Valve.	(b)(6)			
<i>f</i> .1	If Air is not blowing from S2(3)2420MU301 [S2(3)2420MU303], <u>then</u> THROTTLE OPEN the drain valve until air is blowing from drain.				

2.0 PROCEDURE (Continued)

2.3 Diesel Generator Start

		PERF. BY INITIALS START 1	PERF. BY INITIALS START 2	PERF. BY INITIALS START 3	PERF. BY INITIALS START 4
<i>f</i> 2.3.20	RECORD Subsystem #1 Post start Air Start Manifold pressure: _____ PI-5958B(D)	N/A			
<i>f</i> 2.3.21	RECORD Subsystem #2 Post start Air Start Manifold pressure: _____ PI-5958A(C)	N/A			
<i>f</i> 2.3.22	COMMENCE REALIGNING the Diesel Air Start System per Section 2.5. (May be performed after Diesel is loaded.)	(b)(6)			
<i>f</i> 2.3.23	ENSURE IN AUTO C-012A (C-013A), Starting Air Compressor Power Supply Handswitch, at BDX-09 (BHX-09).	N/A			
<i>f</i> 2.3.24	ENSURE IN AUTO C-012B (C-013B), Starting Air Compressor Power Supply Handswitch, at BDX-10 (BHX-10).	N/A			
2.3.25	<u>If</u> desired to shutdown the Diesel prior to loading the engine, <u>then</u> SECURE the Diesel per Section 2.9.				
2.3.26	<u>If</u> it is desired to return the Diesel to 450 rpm, <u>then</u> Mark N/A steps of next start column per the guidance of Section 1.0, Mark N/A Steps 2.3.3 through 2.3.12, <u>and</u> go to Step 2.3.2. (Attach additional copies of Section 2.3 if required.)				

END OF SECTION 2.3

2.0 PROCEDURE (Continued)

2.4 Synchronizing and Loading the Diesel Generator
(LS-6.6)

		PERF. BY INITIALS START 1	PERF. BY INITIALS START 2	PERF. BY INITIALS START 3	PERF. BY INITIALS START 4
2.4.1	ENSURE D/G control aligned to the Control Room.	(b)(6)			
2.4.2	SELECT HS-1627-1(2), SYNC CKT CONTROL, to ON:				
2.4.3	DEPRESS HS-1664-1(HS-1642-2), D/G Breaker SYNC pushbutton.				
2.4.4	Using HS-1669-1(HS-1642-2), VOLTAGE REGULATOR, and the Control Room <i>digital voltmeters</i> MATCH incoming and running voltages. (LS-7.2)				
2.4.5	Using HS-1671-1(HS-1650-2), GOVERNOR CONTROL, ADJUST D/G SPEED so that the synchroscope is <i>moving slowly in the clockwise direction</i> .				
2.4.6	<u>When</u> the synchroscope is within 2 minutes of the straight up position, <u>then</u> CLOSE A0413(A0613), Diesel Generator Breaker. (LS-6.7, LS-6.8, and LS-6.9)				
.1	RAISE LOAD to approximately 1.2 MW by depressing HS-1671-1(HS-1650-2), GOVERNOR CONTROL.				
.2	MAINTAIN positive VAR loading of 0.1 to 0.5 MVARs for duration of load ramp using HS-1669-1 (HS-1642-2), VOLTAGE REGULATOR. (LS-7.2)				
2.4.7	VERIFY ILLUMINATED HS-1671-1(HS-1607-2), GOVERNOR CONTROL DROOP IN light.				
2.4.8	DEPRESS HS-1664-1(HS-1642-2), D/G Breaker SYNC pushbutton.				
.1	SELECT HS-1627-1(2), SYNC CKT CONTROL, to OFF.				

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2.0 PROCEDURE (Continued)

2.4 Synchronizing and Loading the Diesel Generator
(LS-6.6)

		PERF. BY INITIALS START 1	PERF. BY INITIALS START 2	PERF. BY INITIALS START 3	PERF. BY INITIALS START 4
2.4.9 1704	After Diesel Generator load has been maintained at ~1.2 MW for 5 to 10 minutes, <u>then</u> ESTABLISH the <i>desired load</i> per the following guidelines by depressing HS-1671-1 (HS-1670-2), GOVERNOR CONTROL: (Loads and/or durations may be modified as required for specific testing, e.g. per script.) (LS-6.2, LS-6.5, and LS-6.10) 1709 • ~2.4 MW for 5 to 10 minutes 1716 • ~3.6 MW for 5 to 10 minutes 1723 • ≥ 4.45 MW and ≤ 4.70 MW (Normal full load) 1724 • ≥ 4.70 MW and ≤ 5.17 MW (if required for testing) <i>6</i>	(b)(6)			
2.4.10	<u>When</u> Load is ≥ 4.45 MW and ≤ 4.70 MW, <u>then</u> ADJUST positive VAR loading using HS-1669-1 (HS-1670-2), VOLTAGE REGULATOR, until <u>one</u> of the following conditions is met: (Mark N/A if load is not ≥ 4.45 MW and ≤ 4.70 MW.) (LS-7.2 and LS-7.4) • 3.0 - 3.2 MVAR • 4.53 kV to 4.55 kV Bus Voltage • 730-750 amps D/G Output Current • Exciter field current of 3.8 - 4.0 amps DC	(b)(6)			
2.4.11	MAINTAIN VAR loading for duration of Diesel Generator run.	(b)(6)			
.1	<u>If</u> VAR loading cannot be maintained, <u>then</u> Declare the aligned AVR INOPERABLE. (DCE 070300161) (LS-7.2 and LS-7.5)				

2.0 PROCEDURE (Continued)

2.4 Synchronizing and Loading the Diesel Generator
(LS-6.6)

		PERF. BY INITIALS START 1	PERF. BY INITIALS START 2	PERF. BY INITIALS START 3	PERF. BY INITIALS START 4
<i>f</i> 2.4.12	After the Diesel Generator has been at the desired load for ≥ 45 minutes, <u>then</u> record Diesel local parameters. (Handheld Computer or a Computer printout.) (Mark N/A if not loaded ≥ 45 minutes.)	N/A			
2.4.13	After the Diesel Generator has been at the desired load for ≥ 45 minutes, <u>then</u> record 10 Meter temperature from the Met Tower Recorder or PCS: (Mark N/A if not loaded ≥ 45 minutes.) 10 Meter Temperature: _____ (include units)	N/A			
.1	If Temperature is $> 80^{\circ}\text{F}$ ($> 26.7^{\circ}\text{C}$), <u>then</u> initiate an AR to Maintenance Engineering to evaluate the impact on engine maintenance. (LS-6.13)				
2.4.14	TRANSFER HS-1665-1(HS-1644-2), MODE SELECTOR, to LOCAL CONTROL at CR-63. (Mark N/A Section 2.4.14 if not desired to locally control load.)	N/A			
<i>f</i> .1	VERIFY ILLUMINATED ZL-E918(ZL-E968), LOCAL CONTROL light. [L-160(L-161)]	↓			
<i>f</i> 2.4.15	Using HS-940(HS-E990), GOVERNOR, and HS-942(HS-E992), VOLTAGE ADJUST, Locally Adjust Diesel Load and VARs as directed by Electrical Test and/or Engineering. (Mark N/A if not desired to locally control load.)	N/A			
<i>f</i> 2.4.16	When local load control is complete, <u>then</u> DEPRESS HS-1665-1(HS-1644-2), MODE SELECTOR, LOCAL CONTROL pushbutton at CR-63 to transfer Diesel Control to the Control Room. (Mark N/A Section 2.4.16 if not desired to locally control load.)	N/A			
<i>f</i> .1	VERIFY EXTINGUISHED ZL-E918(ZL-E968), LOCAL CONTROL light. [L-160(L-161)]	↓			

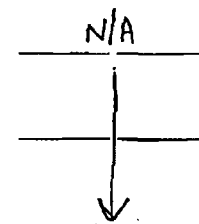
2.0 PROCEDURE (Continued)

INITIALS
PERF /IND VER

2.5 Re-aligning Start Air System (Section 2.5 not required to be reperformed for Diesel restarts.)

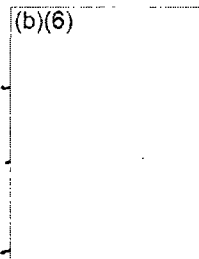
2.5.1 Re-align from G002 Starting Air Subsystem #1 alignment, as follows:

- f* .1 LOCK OPEN S2(3)2420MU085, DG G002 Starting Air Subsystem #2 Air Receiver T336 Outlet Isolation Valve.
- f* .2 LOCK OPEN S2(3)2420MU083, DG G002 Eng #1 (16 Cyl) Start Air Subsys #2 Right Bank Vlv HV5931D Inlet Iso.
- f* .3 LOCK OPEN S2(3)2420MU084, DG G002 Eng #2 (20 Cyl) Start Air Subsys #2 Left Bank Vlv HV5931C Inlet Iso.



2.5.2 Re-align from G002 Starting Air Subsystem #2 alignment, as follows:

- f* .1 LOCK OPEN S2(3)2420MU087, DG G002 Starting Air Subsystem #1 Air Receiver T335 Outlet Isolation Valve.
- f* .2 LOCK OPEN S2(3)2420MU081, DG G002 Eng #2 (20 Cyl) Start Air Subsys #1 Right Bank Vlv HV5931A Inlet Iso.
- f* .3 LOCK OPEN S2(3)2420MU082, DG G002 Eng #1 (16 Cyl) Start Air Subsys #1 Left Bank Vlv HV5931B Inlet Iso.



END OF SECTION 2.5.2

2.0 PROCEDURE (Continued)

INITIALS
PERF /IND VER

2.5.3 Re-align from G003 Starting Air Subsystem #1 alignment, as follows:

- f* .1 LOCK OPEN S2(3)2420MU094, DG G003 Starting Air Subsystem #2 Air Receiver T338 Outlet Isolation Valve.
- f* .2 LOCK OPEN S2(3)2420MU111, DG G003 Eng #1 (16 Cyl) Start Air Subsys #2 Right Bank Vlv HV5931H Inlet Iso.
- f* .3 LOCK OPEN S2(3)2420MU112, DG G003 Eng #2 (20 Cyl) Start Air Subsys #2 Left Bank Vlv HV5931G Inlet Iso.

N/A
↓

2.5.4 Re-align from G003 Starting Air Subsystem #2 alignment, as follows:

- f* .1 LOCK OPEN S2(3)2420MU096, DG G003 Starting Air Subsystem #1 Air Receiver T337 Outlet Isolation Valve.
- f* .2 LOCK OPEN S2(3)2420MU109, DG G003 Eng #2 (20 Cyl) Start Air Subsys #1 Right Bank Vlv HV5931E Inlet Iso.
- f* .3 LOCK OPEN S2(3)2420MU110, DG G003 Eng #1 (16 Cyl) Start Air Subsys #1 Left Bank Vlv HV5931F Inlet Iso.

N/A
↓

END OF SECTION 2.5.4

2.0 PROCEDURE (Continued)

PERF. BY
INITIALS

2.6 Paralleling a Diesel Supplied Isochronous Bus to the RAT: (LS-6.6)

- f* 2.6.1 Ensure the affected Switchgear Room is clear of all unnecessary personnel and maintain it clear until after the Diesel is paralleled to the 4kV bus.
- 2.6.2 Verify that the associated Reserve Auxiliary Transformer is energized and available to pick up the load.
- 2.6.3 PLACE Synchronization Master Control switch to ON.
- 2.6.4 DEPRESS the Reserve Auxiliary Transformer XR1(XR2) FDR BKR A0418 (A0618) SYNC Pushbutton.
- 2.6.5 Using HS-1669-1(HS-1648-2), VOLTAGE REGULATOR, MATCH incoming and running voltages at the synchroscope.
- 2.6.6 Using HS-1671-1(HS-1650-2), GOVERNOR CONTROL, ADJUST D/G SPEED so that the synchroscope is *moving slowly in the clockwise direction*.

NOTE

To prevent a reverse power condition, the Diesel should have a minimum load applied immediately after being paralleled to the 4kV bus.

- 2.6.7 When the Synchroscope is within "3 minutes" of the straight up position, then CLOSE the Reserve Auxiliary Transformer Breaker. (LS-6.8)
- 2.6.8 RAISE LOAD on the Diesel to approximately 1.2 MW by depressing HS-1671-1(HS-1650-2), GOVERNOR CONTROL.
- 2.6.9 VERIFY ILLUMINATED HS-1671-1(HS-1650-2), GOVERNOR CONTROL DROOP IN light.
- 2.6.10 MAINTAIN VARS between 0.1 to 0.5 MVARs positive by adjusting the D/G Voltage Regulator using HS-1669-1 (HS-1648-2), VOLTAGE REGULATOR.
- 2.6.11 REMOVE the Reserve Auxiliary Transformer Breaker from sync circuit.
- 2.6.12 SELECT HS-1627-1(2), SYNC CKT CONTROL, to OFF.

N/A

2.0 PROCEDURE (Continued)

PERF. BY
INITIALS

2.7 Paralleling a Diesel Supplied Isochronous Bus to the UAT: (LS-6.6)

- f* 2.7.1 Ensure the affected Switchgear Room is clear of all unnecessary personnel and maintain it clear until after the Diesel is paralleled to the 4kV bus.
- 2.7.2 Verify that the associated Unit Auxiliary Transformer is energized and available to pick up the load.
- 2.7.3 PLACE Synchronization Master Control switch to ON.
- 2.7.4 DEPRESS the Unit Auxiliary Transformer XU1 FDR BKR A0419 (A0616) SYNC Pushbutton.
- 2.7.5 Using HS-1669-1(HS-1648-2), VOLTAGE REGULATOR, MATCH incoming and running voltages at the synchroscope.
- 2.7.6 Using HS-1671-1(HS-1650-2), GOVERNOR CONTROL, ADJUST D/G SPEED so that the synchroscope is *moving slowly in the COUNTER-CLOCKWISE direction*. (LS-6.12)

NOTE

To prevent a reverse power condition, the Diesel should have a minimum load applied immediately after being paralleled to the 4kV bus.

- 2.7.7 When the Synchroscope is within "3 minutes" of the straight up position, then CLOSE the Unit Auxiliary Transformer Breaker. (LS-6.8)
- 2.7.8 RAISE LOAD on the Diesel to approximately 1.2 MW by depressing HS-1671-1(HS-1650-2), GOVERNOR CONTROL.
- 2.7.9 VERIFY ILLUMINATED HS-1671-1(HS-1650-2), GOVERNOR CONTROL DROOP IN light.
- 2.7.10 MAINTAIN VARS between 0.1 to 0.5 MVARs positive by adjusting the D/G Voltage Regulator using HS-1669-1 (HS-1648-2), VOLTAGE REGULATOR.
- 2.7.11 REMOVE the Unit Auxiliary Transformer Breaker from sync circuit.
- 2.7.12 SELECT HS-1627-1(2), SYNC CKT CONTROL, to OFF.

N/A

2.0 PROCEDURE (Continued)


2.8 Unloading the Diesel Generator

		PERF. BY INITIALS START 1	PERF. BY INITIALS START 2	PERF. BY INITIALS START 3	PERF. BY INITIALS START 4
2.8.1	Ensure all required operating readings are complete. (Mark N/A if Step 2.4.12 was marked N/A.)	N/A			
2.8.2	REDUCE load on the Diesel Generator to the following values: (Mark N/A Section 2.8.2 if Output Breaker to be opened under load.) (LS-6.2, LS-6.11, and LS-7.3)				
.1	0.1 MW to 0.2 MW using HS-1671-1(HS-1650-2), GOVERNOR CONTROL.	(b)(6)			
.2	0.1 to 0.5 MVARs using HS-1669-1 (HS-1648-2), VOLTAGE REGULATOR.				
2.8.3	OPEN A0413(A0613), Diesel Generator Breaker.				
2.8.4	If it is desired to load the Diesel using the currently selected AVR prior to stopping, <u>then</u> go to Step 2.4.1.				

END OF SECTION 2.8

2.0 PROCEDURE (Continued)

2.9 Stopping the Diesel Generator

		PERF. BY INITIALS START 1	PERF. BY INITIALS START 2	PERF. BY INITIALS START 3	PERF. BY INITIALS START 4
2.9.1	Transfer Diesel Control to LOCAL, as follows:				
.1	TRANSFER HS-1665-1(HS-1644-2), MODE SELECTOR, to LOCAL CONTROL at CR-63.	(b)(6)			
<i>f</i> .2	VERIFY ILLUMINATED ZL-E918 (ZL-E968), LOCAL CONTROL light. [L-160(L-161)]				
2.9.2	Reduce speed to idle, as follows: (LS-6.2 and LS-7.3)				
<i>f</i> .1	DEPRESS HS-1701A(B), IDLE SPEED ON pushbutton. [L-160(L-161)]	(b)(6)			
<i>f</i> .2	VERIFY ILLUMINATED ZL-1700A(B), IDLE SPEED light. [L-160(L-161)]				
<i>f</i> .3	VERIFY the Diesel at idle speed. Idle Time: 1135				
.4	If it is desired to continue testing, <u>then</u> Mark N/A the remaining steps of the current START Column of this section, <u>and</u> go to Step 2.3.13.				
 .5	Allow to run at idle for at least: (Check one.) (LS-6.4) <input checked="" type="checkbox"/> Diesel was loaded: 15 minutes <input type="checkbox"/> Diesel was not loaded: 5 minutes	(b)(6)			
<i>f</i> 2.9.3	ENSURE both AC Lube Oil Circulating Pumps <u>and</u> both Turbocharger Pumps are operating.				
<i>f</i> 2.9.4	VERIFY the Air Start Manifolds > 185 psig as indicated on PI-5958A(C) and PI-5958B(D).				
.1	If NO, <u>then</u> initiate Attachment 14.				

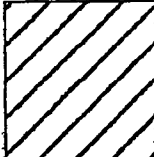
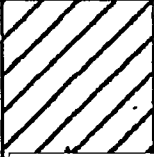
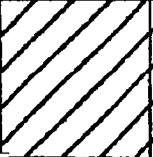
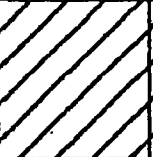

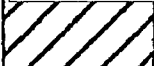

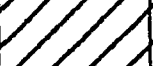

2.0 PROCEDURE (Continued)

2.9 Stopping the Diesel Generator

			PERF. BY INITIALS START 1	PERF. BY INITIALS START 2	PERF. BY INITIALS START 3	PERF. BY INITIALS START 4
2.9.5	ENSURE D/G control aligned to the Control Room.		N/A			
f 2.9.6	.1 STOP the Diesel from the Control Room and RECORD time.	Stop Time:				
2.9.6	Locally shut down the Diesel, as follows:					
f 2.9.7	.1 After notifying the Control Room that the Diesel has run in idle for >15 minutes or >5 minutes, as required, or if locally stopping from 900 rpm, then ROTATE HS-5995-1(2), Local Engine Control, to STOP and RECORD time. (LS-5.5)	Stop Time:	(b)(6)			
		17:51				
2.9.7	Return Diesel Control to Control Room, as follows:					
f 2.9.8	.1 DEPRESS HS-1702A(B), IDLE SPEED OFF. [L-160(L-161)]		(b)(6)			
f 2.9.9	.2 VERIFY EXTINGUISHED ZL-1700A(B), IDLE SPEED light. [L-160(L-161)]					
	.3 DEPRESS HS-1665-1(HS-1624-2), MODE SELECTOR, LOCAL CONTROL pushbutton at CR-63 to transfer Diesel Control to the Control Room.					
f 2.9.10	.4 VERIFY EXTINGUISHED ZL-E918 (ZL-E968), LOCAL CONTROL light. [L-160(L-161)]		(b)(6)			
f 2.9.11	2.9.8 RECORD Engine Hours from KI-E928(KI-E978) located on L-160(161):	1524.4				
		Engine Hours:	1524.4			
f 2.9.12	2.9.9 RECORD kWh Meter at A0413 (A0613): (Mark N/A if Diesel was not loaded.)		(b)(6)			
		kWh Meter: 753				

2.0 PROCEDURE (Continued)

2.9 Stopping the Diesel Generator

		PERF. BY INITIALS START 1	PERF. BY INITIALS START 2	PERF. BY INITIALS START 3	PERF. BY INITIALS START 4
	NOTE: 159/81, Volts per Cycle Relay, may drop during transfers between idle speed and rated speed, and windows 63B19(63C19) and/or 63B29(63C29) may annunciate. (AR 021101161, AR 070100987)				
f 2.9.10	After Diesel is stopped, <u>then</u> ENSURE RESET 159/81, Volts per Cycle Relay for G-002(G-003) on A0414(A0614).	(b)(6)			
2.9.11	<u>If</u> it is desired to rapidly restart the Diesel, <u>then</u> Mark N/A steps of next start column per the guidance of Section 1.0, <u>and</u> go to Step 2.3.1.				

END OF SECTION 2.9

2.0 PROCEDURE (Continued)

PERF. BY
INITIALS

2.10 Post Run Actions

2.10.1 Ensure all measuring devices installed to monitor/record Diesel Generator parameters are removed. N/A

2.10.2 If time to reach generator voltage of 4.224 kV in Step 2.3.16, or generator frequency of 59.76 HZ in Step 2.3.17 was > 8.25 seconds (with both air start systems aligned), then initiate an AR for D/G degraded performance, and notify the Maintenance Engineer for enhanced monitoring. (This step does NOT make D/G INOPERABLE.) (Mark N/A if Steps 2.3.16 and 2.3.17 were ≤ 8.25 seconds, or only one air system aligned.) N/A

Name of ME Notified

Date

Time

NOTE

This attachment DOES NOT document Tech. Spec. Surveillance Acceptance Criteria. Tech. Specs. are called out for reference only.

2.10.3 RECORD the level in the Diesel Fuel Oil Storage Tank T-035 (T-036) at CR-60 or Local Soundings. (LS-4.1)

(b)(6)

93 %
LI-5903-1 (LI-5906-2)
or Local Soundings

.1 Is Fuel Oil Storage Tank at the required level? (Tech. Spec. SR 3.8.3.1, Ref. 2.3.3.3)

✓	FOST LEVEL	APPLICABLE TS
✓	≥ 87% (Mode 1-4) ≥ 78% (Mode 5-6)	NONE
	≥ 74% <u>and</u> < 87% (Mode 1-4) ≥ 67% <u>and</u> < 78% (Mode 5-6)	Tech. Spec. 3.8.3
	< 74% (Mode 1-4) < 67% (Mode 5-6)	Tech. Spec. 3.8.1

(b)(6)

YES / NO

2.0 PROCEDURE (Continued)

PERF. BY
INITIALS

2.10.3.2 If Fuel Oil Storage Tank level is \leq 89% (Mode 1-4), or \leq 80% (Mode 5 or 6), then notify SRO Ops. Supv. to order Diesel Fuel Oil.

.3 If in Modes 5-6, and Fuel Oil Storage Tank is $<$ 87%, then Initiate a Mode 4 EDMR.

f 2.10.4 T-133(T-134), Day Tank Fuel Level, \geq 31.5 inches. (LS-4.1) (Tech. Spec. SR 3.8.1.4, SR 3.8.2.1, Ref. 2.3.3.2)

(b)(6)

YES NO

f 2.10.5 Both engine lube oil levels are at the required level on dipstick. (LS-10.1, LS-10.2) (Tech. Spec. SR 3.8.3.2)

✓	LUBE OIL LEVEL	APPLICABLE TS
✓	\geq TSMIN mark	NONE
	\geq TSINOP mark and $<$ TSMIN mark	Tech. Spec. 3.8.3
	$<$ TSINOP	Tech. Spec. 3.8.1

(b)(6)

YES / NO

f 2.10.6 Air Receivers at required pressure as indicated on PI-5958A(C) & PI-5958B(D), Air Start Manifold Pressure Indicators. Separate Actions are applicable for each Subsystem. (Tech. Spec. SR 3.8.3.4)

✓	AIR RECEIVER PRESSURE	APPLICABLE TS
✓	\geq 175 psig	NONE
	\geq 136 psig and $<$ 175 psig	Tech. Spec. 3.8.3
	$<$ 136 psig (LS-1.3)	Affected Air Start Subsystem INOPERABLE. (Tech. Spec. 3.8.3)
	All aligned Air Receivers $<$ 136 psig	Tech. Spec. 3.8.1.

(b)(6)

YES NO

2.0 PROCEDURE (Continued)

PERF. BY
INITIALS

- f* 2.10.7 Inspect for signs of fuel leakage in the associated Tank Vault (inspection tube) and under the grating of the Diesel Building Trenches. (AR 030100114)

- ☒ Leakage not found.
☐ Leakage found: AR _____

(b)(6)

- 2.10.8 Request Facilities (PAX 83979 or 83333) align D1N HVAC dampers to normal. (Mark N/A all of Section 2.10.8 if another Diesel Start is to be performed per Return to Service plan.)

N/A

- .1 Name of Facilities Department person contacted:

↓

Person Contacted

Date

Time

- 2.10.9 ATTACH a copy of the readings taken in Step 2.4.12 to this attachment. (Mark N/A if not loaded ≥ 45 minutes.)

N/A

END OF SECTION 2.10

3.0 Logging Results of Diesel Generator Run

PERF. BY
INITIALS

(b)(6)

- 3.1 Complete Diesel Generator Start Evaluation Report per SO123-0-A4, Attachment for Diesel Generator Starts - Units 2 and 3.
- 3.2 Reports on Diesel Generator failures, valid or non-valid, shall be reported to the NRC in accordance with LCS 5.0.104.2.b.
 - 3.2.1 Notify Engineering and request a report to be made to the NRC should a Diesel Generator failure occur.
 - 3.2.2 Notify the Maintenance Engineer of any D/G failures.

COMMENTS: _____

REVIEWED BY:

(b)(6)
SRO Ofc. Supv.

DATE:

8-20-08

FILE DISPOSITION:

File per SO123-0-A3.
Surveillance/Compliance Group: Forward a copy of this attachment and readings taken in Step 2.4.12 to the Maintenance Engineer.

Start Time: 8/20/2008 17:00:00

Archive Sample Rate: 1 second

End Time: 8/20/2008 17:33:00

Real-Time Sample Rate: 1 second

song3:JT8020

0.30 KW

3500.00
2000.00
7000.00

song3:C_170 001

0.00 AMP

240
2100.00

song3:C_JT80002

1.00 EVAP

736.00
5590.00

song3:C_170 002

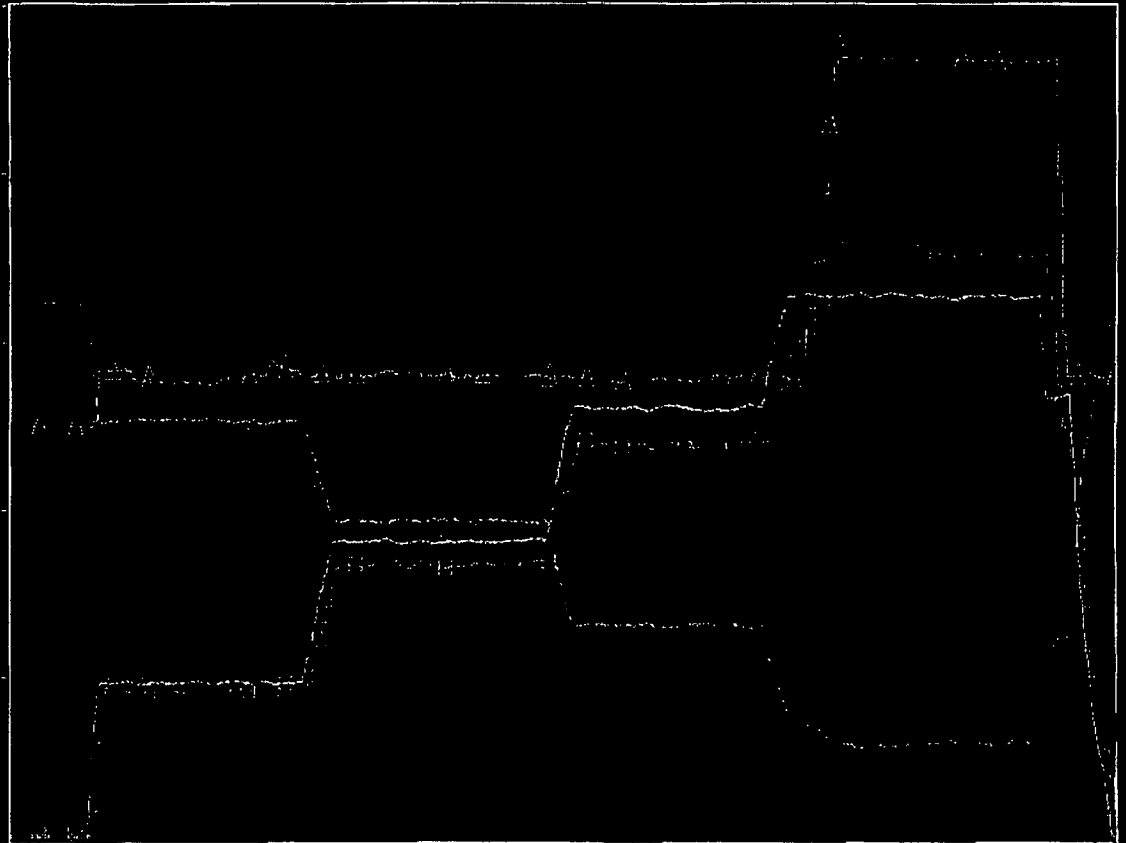
0.00 AMP

0.00
700.00
556.00
4180.00

0.00
700.00
354.00
2770.00

0.00
2100.00
192.00
1350.00

3500.00
2000.00
50.00



8/20/2008 17:01:00

8/20/2008 17:12:00

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