

GENERIC FUNDAMENTALS EXAMINATION
EQUATIONS AND CONVERSIONS SHEET

EQUATIONS

$$\dot{Q} = \dot{m}c_p\Delta T$$

$$A = A_0 e^{-\lambda t}$$

$$\dot{Q} = \dot{m}\Delta h$$

$$N = S/(1 - K_{\text{eff}})$$

$$\dot{Q} = UA\Delta T$$

$$CR_1(1 - K_{\text{eff}_1}) = CR_2(1 - K_{\text{eff}_2})$$

$$\dot{Q} \propto \dot{m}_{\text{Nat Circ}}^3$$

$$1/M = CR_1/CR_x$$

$$\Delta T \propto \dot{m}_{\text{Nat Circ}}^2$$

$$A = \pi r^2$$

$$K_{\text{eff}} = 1/(1 - \rho)$$

$$F = PA$$

$$\rho = (K_{\text{eff}} - 1)/K_{\text{eff}}$$

$$\dot{m} = \rho A \vec{v}$$

$$\text{SUR} = 26.06/\tau$$

$$\dot{W}_{\text{pump}} = \dot{m}\Delta P_u$$

$$\tau = \frac{\bar{\beta}_{\text{eff}} - \rho}{\lambda_{\text{eff}} \rho}$$

$$P = IE$$

$$\rho = \frac{\ell^*}{\tau} + \frac{\bar{\beta}_{\text{eff}}}{1 + \lambda_{\text{eff}} \tau}$$

$$P_A = \sqrt{3}IE$$

$$P_T = \sqrt{3}IEpf$$

$$\ell^* = 1.0 \times 10^{-4} \text{ sec}$$

$$P_R = \sqrt{3}IE\sin\theta$$

$$\lambda_{\text{eff}} = 0.1 \text{ sec}^{-1} \text{ (for small positive } \rho \text{)}$$

$$\text{Thermal Efficiency} = \text{Net Work Out/Energy In}$$

$$\text{DRW} \propto \varphi_{\text{tip}}^2 / \varphi_{\text{avg}}^2$$

$$\frac{g(z_2 - z_1)}{g_c} + \frac{(\vec{v}_2^2 - \vec{v}_1^2)}{2g_c} + v(P_2 - P_1) + (u_2 - u_1) + (q - w) = 0$$

$$P = P_0 e^{t/\tau}$$

$$g = 32.2 \text{ ft/sec}^2$$

$$P = P_0 10^{\text{SUR}(t)}$$

$$g_c = 32.2 \text{ lbm-ft/lbf-sec}^2$$

CONVERSIONS

$$1 \text{ MW} = 3.41 \times 10^6 \text{ Btu/hr}$$

$$^{\circ}\text{C} = (5/9)(^{\circ}\text{F} - 32)$$

$$1 \text{ ft}^3_{\text{water}} = 7.48 \text{ gal}$$

$$1 \text{ hp} = 2.54 \times 10^3 \text{ Btu/hr}$$

$$^{\circ}\text{F} = (9/5)(^{\circ}\text{C}) + 32$$

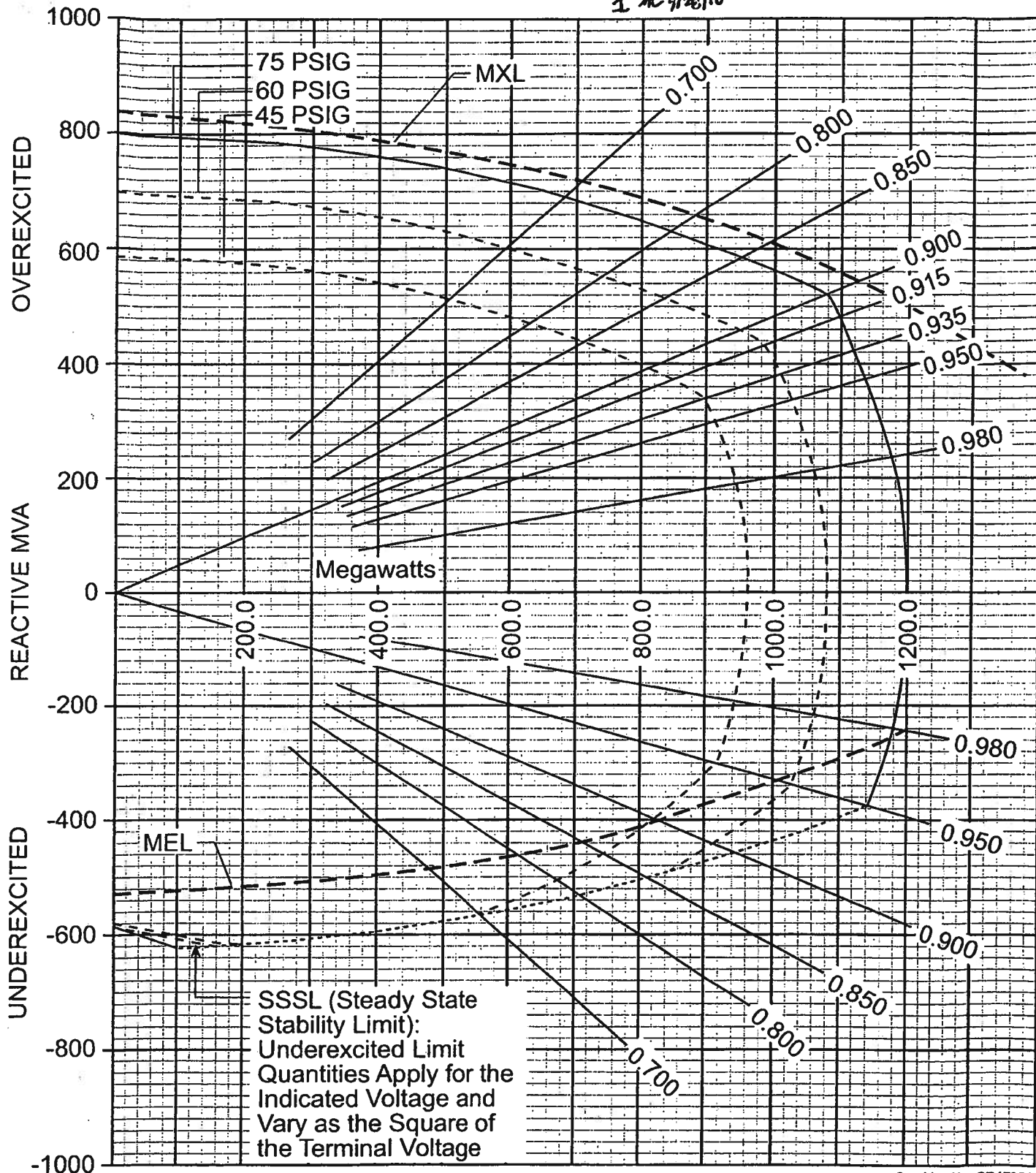
$$1 \text{ gal}_{\text{water}} = 8.35 \text{ lbm}$$

$$1 \text{ Btu} = 778 \text{ ft-lbf}$$

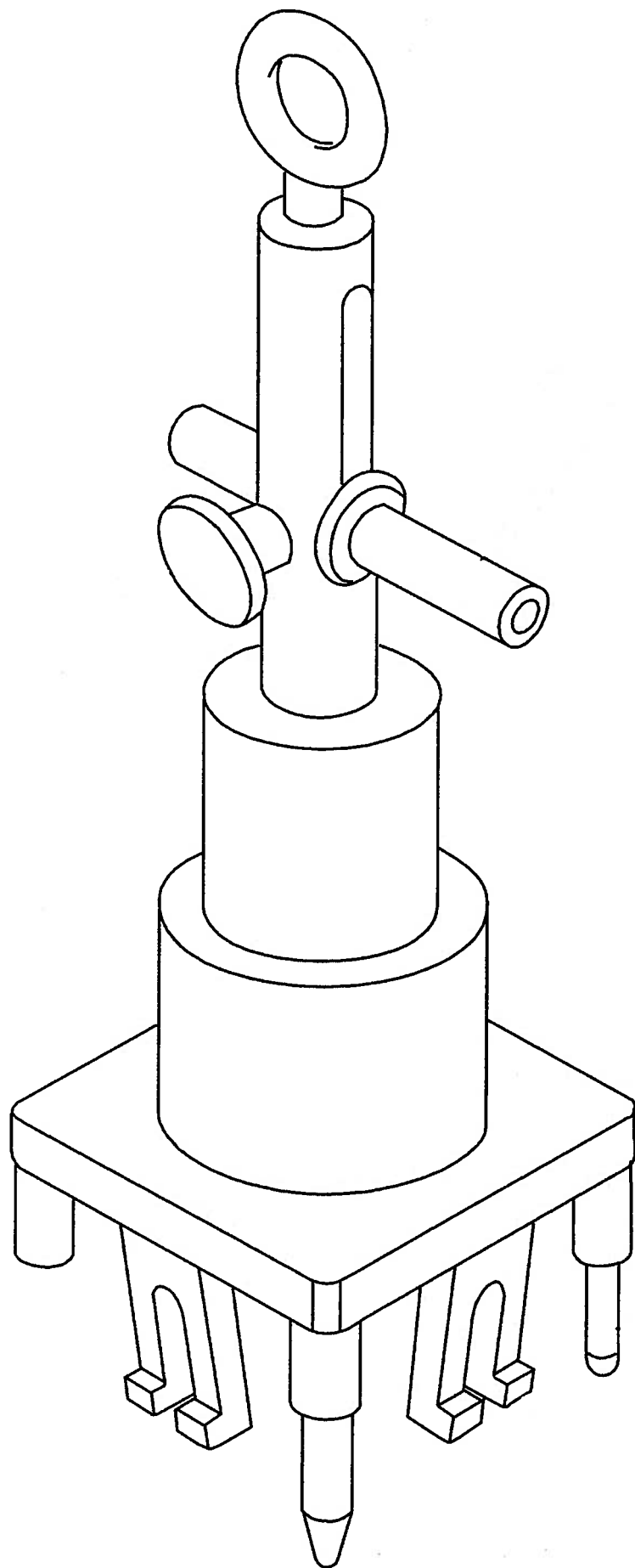
$$1 \text{ kg} = 2.21 \text{ lbm}$$

$$1 \text{ Curie} = 3.7 \times 10^{10} \text{ dps}$$

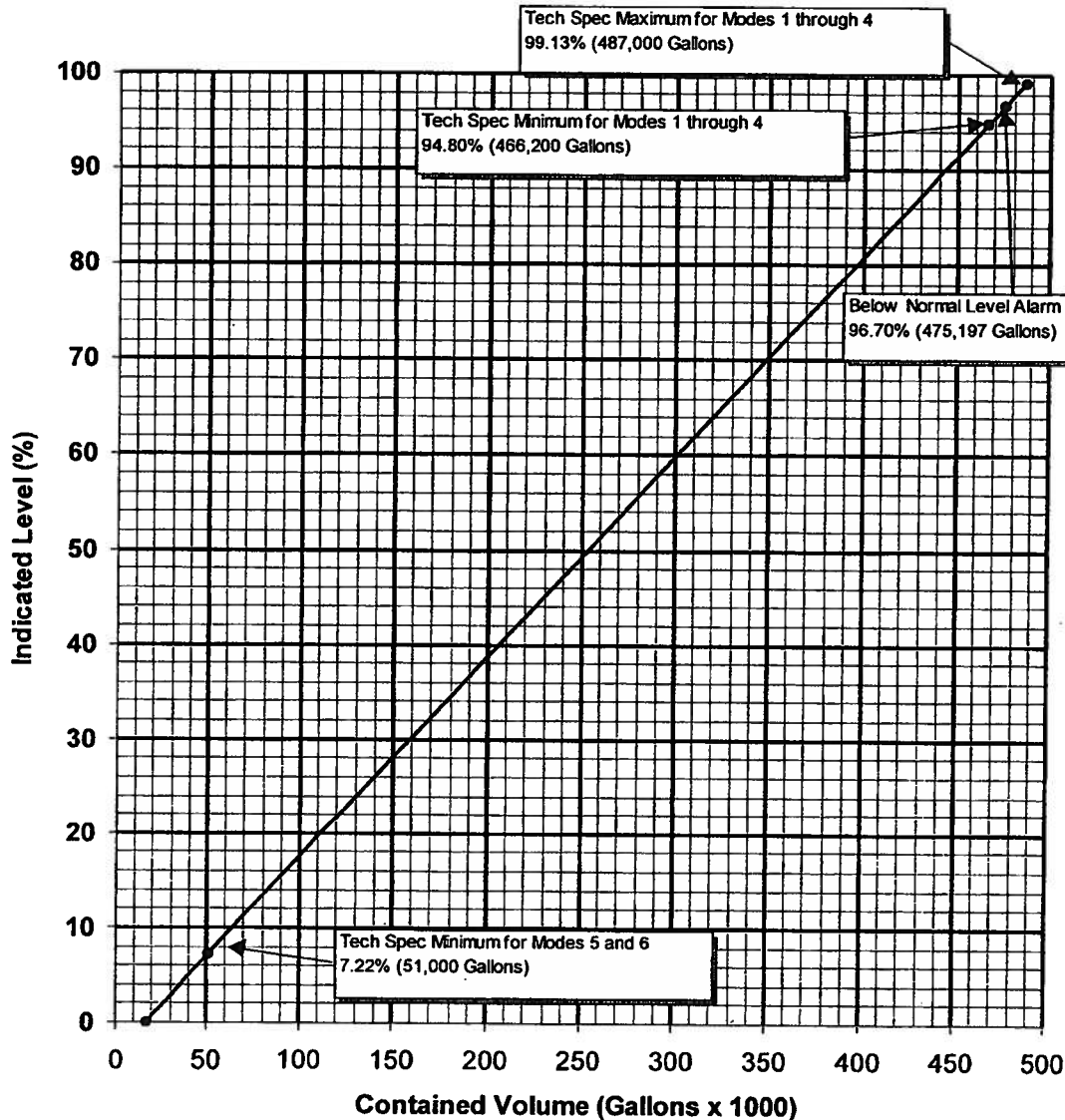
1 11/28/10



Approved By: [Signature] Date: 9/27/2010



Refueling Water Storage Tank 1-QS-TK-1



Notes:

- The tank contains 16,784 gallons at 0% indication.
- ET N-01-139 provides the calculation bases.
- The graph is shown with tank fluid at an average density.
- To be conservative, the maximum percent level (for modes 1 through 4) shown was calculated for a tank fluid at minimum density; maximum temperature (50°F) and minimum boron concentration (2600 PPM).
- To be conservative, the minimum percent level (for modes 1 through 4) shown was calculated for a tank fluid at maximum density; minimum temperature (40°F) and maximum boron concentration (2800 PPM).
- To be conservative, the minimum percent level (for modes 5 and 6) shown was calculated for a tank fluid at maximum density; minimum temperature (35°F) and maximum boron concentration (2800 PPM).

APPROVAL:

7A Kendra

DATE:

9/24/01

3.8 ELECTRICAL POWER SYSTEMS

3.8.1 AC Sources—Operating

LC0 3.8.1 The following AC electrical sources shall be OPERABLE:

- a. Two qualified circuits between the offsite transmission network and the onsite Class 1E AC Electrical Power Distribution System;
- b. Two emergency diesel generators (EDGs) capable of supplying the onsite Class 1E power distribution subsystem(s);
- c. One qualified circuit between the offsite transmission network and the onsite Class 1E AC Electrical Power Distribution System and one EDG capable of supplying the onsite Class 1E AC power distribution subsystem on the other unit for each required shared component; and
- d. Required sequencing timing relays.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One LC0 3.8.1.a offsite circuit inoperable.	A.1 Perform SR 3.8.1.1 for required OPERABLE offsite circuit(s).	1 hour
	<u>AND</u>	<u>AND</u> Once per 8 hours thereafter (continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. (continued)	A.2 Declare required feature(s) with no offsite power available inoperable when its redundant required feature(s) is inoperable.	24 hours from discovery of no offsite power to one train concurrent with inoperability of redundant required feature(s)
	<u>AND</u> A.3 Restore offsite circuit to OPERABLE status.	72 hours <u>AND</u> 17 days from discovery of failure to meet LCO
B. One LCO 3.8.1.b EDG inoperable.	B.1 Perform SR 3.8.1.1 for the required offsite circuits.	1 hour <u>AND</u> Once per 8 hours thereafter
	<u>AND</u> B.2 Declare required feature(s) supported by the inoperable EDG inoperable when its required redundant feature(s) is inoperable. <u>AND</u>	4 hours from discovery of Condition B concurrent with inoperability of redundant required feature(s) (continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. (continued)	B.3.1 Determine OPERABLE LCO 3.8.1.b EDG is not inoperable due to common cause failure.	24 hours
	<u>OR</u>	
	B.3.2 Perform SR 3.8.1.2 for OPERABLE LCO 3.8.1.b EDG.	24 hours
	<u>AND</u>	
	B.4 Restore EDG to OPERABLE status.	14 days
		<u>AND</u>
		17 days from discovery of failure to meet LCO
C. -----NOTE----- Only applicable if Alternate AC (AAC) diesel generator (DG) or one or more EDG on the other unit is inoperable. ----- One LCO 3.8.1.b EDG inoperable.	C.1.1 Restore inoperable AAC DG to OPERABLE status.	72 hours
	<u>AND</u>	
	C.1.2 Restore inoperable EDG(s) on other unit to OPERABLE status.	72 hours
	<u>OR</u>	
	C.2 Restore EDG to OPERABLE status.	72 hours

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>D. -----NOTE----- Separate Condition entry is allowed for each offsite circuit. -----</p> <p>One or more required LCO 3.8.1.c offsite circuit(s) inoperable.</p>	D.1 Perform SR 3.8.1.1 for required OPERABLE offsite circuit(s).	1 hour
	<u>AND</u>	<u>AND</u>
	D.2 Declare required feature(s) with no offsite power available inoperable when its redundant required feature(s) is inoperable.	Once per 8 hours thereafter
	<u>AND</u>	
	D.3 Declare associated shared component inoperable.	24 hours from discovery of no offsite power to a train concurrent with inoperability of redundant required feature(s)
		72 hours

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. One required LCO 3.8.1.c EDG inoperable.	E.1 Perform SR 3.8.1.1 for required offsite circuit(s).	1 hour <u>AND</u> Once per 8 hours thereafter
	<u>AND</u> E.2 Declare required feature(s) supported by the inoperable EDG inoperable when its redundant required feature(s) is inoperable.	4 hours from discovery of Condition E concurrent with inoperability of redundant required feature(s)
	<u>AND</u> E.3 Declare associated shared component inoperable.	14 days
F. -----NOTE----- Only applicable if one or more LCO 3.8.1.b EDG(s) or AAC DG is inoperable. ----- One required LCO 3.8.1.c EDG inoperable.	F.1.1 Restore inoperable AAC DG to OPERABLE status.	72 hours
	<u>AND</u> F.1.2 Restore inoperable LCO 3.8.1.b EDG (s) to OPERABLE status.	72 hours
	<u>OR</u> F.2 Declare associated shared component inoperable.	72 hours

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
G. Two LCO 3.8.1.a offsite circuits inoperable.	G.1 Declare required feature(s) inoperable when its redundant required feature(s) is inoperable.	12 hours from discovery of Condition G concurrent with inoperability of redundant required features
	<u>AND</u> G.2 Restore one offsite circuit to OPERABLE status.	24 hours
H. One LCO 3.8.1.a offsite circuit inoperable. <u>AND</u> One LCO 3.8.1.b EDG inoperable.	-----NOTE----- Enter applicable Conditions and Required Actions of LCO 3.8.9, "Distribution Systems—Operating," when Condition H is entered with no AC power source to any train. -----	
	H.1 Restore offsite circuit to OPERABLE status. <u>OR</u> H.2 Restore EDG to OPERABLE status.	12 hours 12 hours
I. Two LCO 3.8.1.b EDGs inoperable.	I.1 Restore one EDG to OPERABLE status.	2 hours
J. Two required LCO 3.8.1.c EDGs inoperable.	J.1 Declare associated shared components inoperable.	Immediately

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>K. -----NOTE----- Separate Condition entry is allowed for each sequencing timing relay. ----- One or more required sequencing timing relay(s) inoperable.</p>	<p>K.1 Enter appropriate Conditions and Required Actions for any component made inoperable by inoperable sequencing timing relay(s).</p>	Immediately
	<p><u>AND</u></p> <p>K.2.1 Place the component(s) with the inoperable sequencing timing relay in a condition where it cannot be automatically loaded to associated emergency electrical bus.</p>	Immediately
	<p><u>OR</u></p> <p>K.2.2 Declare the associated EDG inoperable.</p>	Immediately
<p>L. Required Action and associated Completion Time of Condition A, B, C, G, H, or I not met.</p>	<p>L.1 Be in MODE 3.</p>	6 hours
	<p><u>AND</u></p> <p>L.2 Be in MODE 5.</p>	36 hours
<p>M. Three or more of LCO 3.8.1.a and LCO 3.8.1.b AC sources inoperable.</p>	<p>M.1 Enter LCO 3.0.3.</p>	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.8.1.1 Verify correct breaker alignment and indicated power availability for each required offsite circuit.	In accordance with the Surveillance Frequency Control Program
SR 3.8.1.2 -----NOTES----- 1. All EDG starts may be preceded by an engine prelube period and followed by a warmup period prior to loading. 2. A modified EDG start involving idling and gradual acceleration to synchronous speed may be used for this SR as recommended by the manufacturer. When modified start procedures are not used, the time, voltage, and frequency tolerances of SR 3.8.1.7 must be met. ----- Verify each required EDG starts from standby conditions and achieves steady state voltage ≥ 3740 V and ≤ 4580 V, and frequency ≥ 59.5 Hz and ≤ 60.5 Hz.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.3 -----NOTES-----</p> <ol style="list-style-type: none"> 1. EDG loadings may include gradual loading as recommended by the manufacturer. 2. Momentary transients outside the load range do not invalidate this test. 3. This Surveillance shall be conducted on only one EDG at a time. 4. This SR shall be preceded by and immediately follow without shutdown a successful performance of SR 3.8.1.2 or SR 3.8.1.7. <p>-----</p> <p>Verify each required EDG is synchronized and loaded and operates for ≥ 60 minutes at a load ≥ 2500 kW and ≤ 2600 kW.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.8.1.4 Verify each required day tank contains ≥ 450 gal of fuel oil.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.8.1.5 Check for and remove accumulated water from each required day tank.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.8.1.6 Verify each required fuel oil transfer pump operates to transfer fuel oil from the storage tank to the day tank.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.7 -----NOTE----- All EDG starts may be preceded by an engine prelube period. -----</p> <p>Verify each required EDG starts from standby condition and achieves</p> <p>a. In ≤ 10 seconds, voltage ≥ 3960 V and frequency ≥ 59.5 Hz; and</p> <p>b. Steady state voltage ≥ 3740 V and ≤ 4580 V, and frequency ≥ 59.5 Hz and ≤ 60.5 Hz.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.8.1.8 -----NOTES-----</p> <p>1. This Surveillance is only applicable to Unit 1.</p> <p>2. This Surveillance shall not normally be performed in MODE 1 or 2. However, this Surveillance may be performed to reestablish OPERABILITY provided an assessment determines the safety of the unit is maintained or enhanced. -----</p> <p>Verify manual transfer of AC power sources from the normal offsite circuit to the alternate required offsite circuit.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.9 -----NOTE----- If performed with EDG synchronized with offsite power, it shall be performed at a power factor ≤ 0.9. However, if grid conditions do not permit, the power factor limit is not required to be met. Under this condition, the power factor shall be maintained as close to the limit as practicable. ----- Verify each required EDG rejects a load greater than or equal to its associated single largest post-accident load, and:</p> <ol style="list-style-type: none"> Following load rejection, the frequency is ≤ 66 Hz; Within 3 seconds following load rejection, the voltage is ≥ 3740 V and ≤ 4580 V; and Within 3 seconds following load rejection, the frequency is ≥ 59.5 Hz and ≤ 60.5 Hz. 	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.10 -----NOTES-----</p> <ol style="list-style-type: none"> 1. All EDG starts may be preceded by an engine prelube period. 2. This Surveillance shall not normally be performed in MODE 1, 2, 3, or 4. However, portions of the Surveillance may be performed to reestablish OPERABILITY provided an assessment determines the safety of the unit is maintained or enhanced. <p>-----</p> <p>Verify on an actual or simulated loss of offsite power signal:</p> <ol style="list-style-type: none"> a. De-energization of emergency buses; b. Load shedding from emergency buses; c. Each required EDG auto-starts from standby condition and: <ol style="list-style-type: none"> 1. energizes permanently connected loads in ≤ 10 seconds, 2. energizes auto-connected shutdown loads through sequencing timing relays, 3. maintains steady state voltage ≥ 3740 V and ≤ 4580 V, 4. maintains steady state frequency ≥ 59.5 Hz and ≤ 60.5 Hz, and 5. supplies permanently connected and auto-connected shutdown loads for ≥ 5 minutes. 	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.11 -----NOTES-----</p> <ol style="list-style-type: none"> 1. All EDG starts may be preceded by prelube period. 2. This Surveillance shall not normally be performed in MODE 1 or 2. However, portions of the Surveillance may be performed to reestablish OPERABILITY provided an assessment determines the safety of the unit is maintained or enhanced. <p>-----</p> <p>Verify on an actual or simulated Engineered Safety Feature (ESF) actuation signal each LCO 3.8.1.b EDG auto-starts from standby condition and:</p> <ol style="list-style-type: none"> a. In ≤ 10 seconds after auto-start and during tests, achieves voltage ≥ 3960 V and frequency ≥ 59.5 Hz; b. Achieves steady state voltage ≥ 3740 V and ≤ 4580 V and frequency ≥ 59.5 Hz and ≤ 60.5 Hz; c. Operates for ≥ 5 minutes; d. Permanently connected loads remain energized from the offsite power system; and e. Emergency loads are energized or auto-connected through the sequencing timing relays from the offsite power system. 	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.12 -----NOTE----- This Surveillance shall not normally be performed in MODE 1 or 2. However, this Surveillance may be performed to reestablish OPERABILITY provided an assessment determines the safety of the unit is maintained or enhanced. ----- Verify each required EDG's automatic trips are bypassed on actual or simulated automatic start signals except: a. Engine overspeed; and b. Generator differential current.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.13 -----NOTES-----</p> <ol style="list-style-type: none"> 1. Momentary transients outside the load and power factor ranges do not invalidate this test. 2. This Surveillance shall not normally be performed in MODE 1 or 2. However, this Surveillance may be performed to reestablish OPERABILITY provided an assessment determines the safety of the unit is maintained or enhanced. 3. If performed with EDG synchronized with offsite power, it shall be performed at a power factor ≤ 0.9. However, if grid conditions do not permit, the power factor limit is not required to be met. Under this condition the power factor shall be maintained as close to the limit as practicable. <p>-----</p> <p>Verify each required EDG operates for ≥ 24 hours:</p> <ol style="list-style-type: none"> a. For ≥ 2 hours loaded ≥ 2900 kW and ≤ 3000 kW; and b. For the remaining hours of the test loaded ≥ 2500 kW and ≤ 2600 kW. 	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.14 -----NOTES-----</p> <ol style="list-style-type: none"> 1. This Surveillance shall be performed within 5 minutes of shutting down the EDG after the EDG has operated ≥ 2 hours loaded ≥ 2500 kW and ≤ 2600 kW or after operating temperatures have stabilized. <p>Momentary transients outside of load range do not invalidate this test.</p> <ol style="list-style-type: none"> 2. All EDG starts may be preceded by an engine prelube period. <p>-----</p> <p>Verify each required EDG starts and achieves</p> <ol style="list-style-type: none"> a. In ≤ 10 seconds, voltage ≥ 3960 V and frequency ≥ 59.5 Hz; and b. Steady state voltage ≥ 3740 V, and ≤ 4580 V and frequency ≥ 59.5 Hz and ≤ 60.5 Hz. 	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.8.1.15 -----NOTE-----</p> <p>This Surveillance shall not normally be performed in MODE 1, 2, 3, or 4. However, this Surveillance may be performed to reestablish OPERABILITY provided an assessment determines the safety of the unit is maintained or enhanced.</p> <p>-----</p> <p>Verify each required EDG:</p> <ol style="list-style-type: none"> a. Synchronizes with offsite power source while loaded with emergency loads upon a simulated restoration of offsite power; b. Transfers loads to offsite power source; and c. Returns to ready-to-load operation. 	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.16 -----NOTE----- This Surveillance shall not normally be performed in MODE 1, 2, 3, or 4. However, this Surveillance may be performed to reestablish OPERABILITY provided an assessment determines the safety of the unit is maintained or enhanced. ----- Verify each required sequencing timing relay is within the design tolerance.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.17 -----NOTES-----</p> <ol style="list-style-type: none"> 1. All EDG starts may be preceded by an engine prelube period. 2. This Surveillance shall not normally be performed in MODE 1, 2, 3, or 4. However, portions of the Surveillance may be performed to reestablish OPERABILITY provided an assessment determines the safety of the unit is maintained or enhanced. <p>-----</p> <p>Verify on an actual or simulated loss of offsite power signal in conjunction with an actual or simulated ESF actuation signal:</p> <ol style="list-style-type: none"> a. De-energization of emergency buses; b. Load shedding from emergency buses; and c. Each LCO 3.8.1.b EDG auto-starts from standby condition and: <ol style="list-style-type: none"> 1. energizes permanently connected loads in ≤ 10 seconds, 2. energizes auto-connected emergency loads through load sequencing timing relays, 3. achieves steady state voltage ≥ 3740 V and ≤ 4580 V, 4. achieves steady state frequency ≥ 59.5 Hz and ≤ 60.5 Hz, and 5. supplies permanently connected and auto-connected emergency loads for ≥ 5 minutes. 	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.18 -----NOTE----- All EDG starts may be preceded by an engine prelube period. -----</p> <p>Verify when started simultaneously from standby condition, each LCO 3.8.1.b EDG achieves:</p> <p>a. in ≤ 10 seconds, voltage ≥ 3960 V and frequency ≥ 59.5 Hz; and</p> <p>b. steady state voltage ≥ 3740 V and ≤ 4580 V, and frequency ≥ 59.5 Hz and ≤ 60.5 Hz.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

Feedwater Ultrasonic Flow Meter Calorimetric
3.3.10

3.3 INSTRUMENTATION

3.3.10 Feedwater Ultrasonic Flow Meter Calorimetric

TR 3.3.10 The Feedwater Ultrasonic Flow Meter (UFM) Calorimetric shall be FUNCTIONAL with:

- a. The Feedwater UFM System FUNCTIONAL.
- b. The Plant Computer System (PCS) calorimetric program FUNCTIONAL.

APPLICABILITY: MODE 1 with THERMAL POWER > 2893 MWt (98.4% RTP).

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Feedwater UFM System not FUNCTIONAL.	A.1 Stop power increase.	Immediately
	<u>AND</u>	
	A.2 Change the calorimetric program from the Feedwater UFM System to the Normalized Feedwater Venturi System.	1 hour
	<u>AND</u>	
	A.3 Restore Feedwater UFM System to FUNCTIONAL status.	48 hours

Feedwater Ultrasonic Flow Meter Calorimetric
3.3.10

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. Required Action and associated Completion Time of Condition A not met.	B.1 Reduce THERMAL POWER to ≤ 2893 MWt (98.4% RTP).	1 hour
	<u>AND</u> B.2 Change the calorimetric program from the Normalized Feedwater Venturi System to the Feedwater Venturi System.	1 hour
C. PCS calorimetric program not FUNCTIONAL for reasons other than Condition A.	C.1 Verify THERMAL POWER ≤ 2940 MWt (100% RTP) by monitoring alternate power indications.	Immediately
	<u>AND</u> C.2.1 Restore the PCS calorimetric program to FUNCTIONAL status.	Prior to performing the next required power range channel calorimetric heat balance comparison per TS SR 3.3.1.2
	<u>OR</u> C.2.2 Reduce THERMAL POWER to ≤ 2893 MWt (98.4% RTP) by monitoring alternate power indications.	Prior to performing the next required power range channel calorimetric heat balance comparison per TS SR 3.3.1.2

Feedwater Ultrasonic Flow Meter Calorimetric
3.3.10

TRM SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>TSR 3.3.10.1 -----NOTE----- When in Condition A, the Normalized Feedwater Venturi System will be used to perform the 24 hour surveillance. -----</p> <p>Perform TS SR 3.3.1.2 using the Feedwater UFM System.</p>	<p>Prior to exceeding 2893 MWt (98.4% RTP)</p> <p><u>AND</u></p> <p>Once per 24 hours thereafter</p>
<p>TSR 3.3.10.2 Perform Channel Calibration of the Feedwater UFM System instrumentation.</p>	<p>Once per 18 months</p>