GENERATOR POLARIZATION INDEX (PI) TEST

Your Company Logo

OWNER Example Owner | PAGE 1

PLANT Example Plant | AMBIENT TEMP. °F | DATE 10/10/2014

SUBSTATION GENERATORS | HUMIDITY % | JOB # GENERATORS

POSITION AUTOMATED | ASSET ID

GENERATOR NAMEPLATE DATA:

GENERATOR MFR. | MODEL NO. | S/N

KVA | KW | VOLTS (KV) | AMPS | PHASE | FREQUENCY | RPM

GENERATOR CONTROL MFR. | MODEL NO. | S/N

GOVERNOR MFR. | YEAR MANUF. | TYPE CHOOSE

VOLTAGE REG. MFR. | FRAME TYPE | OTHER

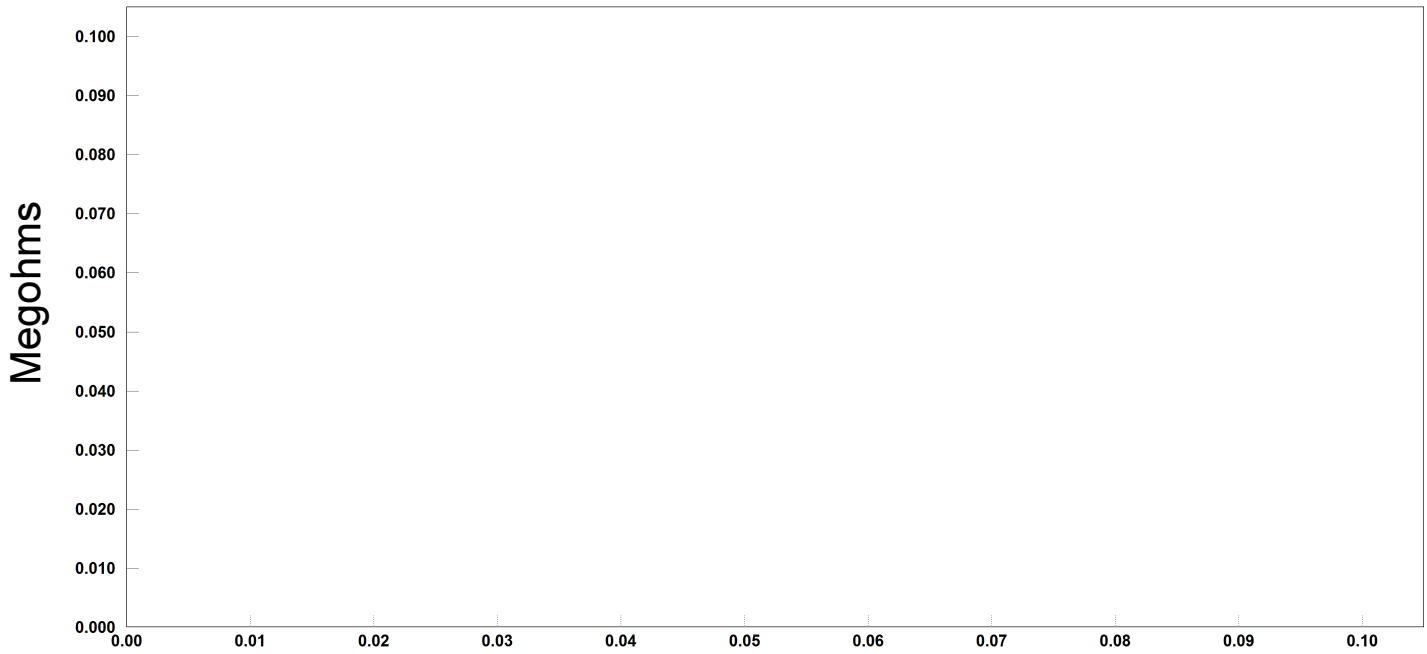
PHASE TO GROUND TEST VOLTAGE kVDC | Enter TCF Manually: ☐ | TEMPERATURE CORRECTION FACTOR TO 20 °C

CORE/COIL TEMPERATURE °C | Use Instrument PI Value: ☐ | INSULATION TYPE DRY

MINUTES	PHASE A TO B			PHASE B TO C			PHASE C TO A		
	READING (megohms)	TEMP. CORR. FACTOR	20°C READING (megohms)	READING (megohms)	TEMP. CORR. FACTOR	20°C READING (megohms)	READING (megohms)	TEMP. CORR. FACTOR	20°C READING (megohms)
0.25									
0.50									
0.75									
1.00									
2.00									
3.00									
4.00									
5.00									
6.00									
7.00									
8.00									
9.00									
10.00									
POLARIZATION INDEX									

TEST EQUIPMENT USED: | TESTED BY: Default Administrator

Polarization Index



PHASE A TO GROUND: Red Square

PHASE B TO GROUND: Blue Circle

PHASE C TO GROUND: Green Triangle

PHASE A TO B: Orange Star

PHASE B TO C: Purple Down Triangle

PHASE C TO A: Grey Diamond

COMMENTS:

DEFICIENCIES:

GENERATOR POLARIZATION INDEX (PI) TEST

Your Company Logo

OWNER Example Owner | PAGE 3

PLANT Example Plant | AMBIENT TEMP. °F | DATE 10/10/2014

SUBSTATION GENERATORS | HUMIDITY % | JOB # GENERATORS

POSITION AUTOMATED | ASSET ID

GENERATOR NAMEPLATE DATA:

GENERATOR MFR. | MODEL NO. | S/N

KVA | KW | VOLTS (KV) | AMPS | PHASE | FREQUENCY | RPM

GENERATOR CONTROL MFR. | MODEL NO. | S/N

GOVERNOR MFR. | YEAR MANUF. | TYPE CHOOSE

VOLTAGE REG. MFR. | FRAME TYPE | OTHER

PHASE TO GROUND TEST VOLTAGE kVDC | Enter TCF Manually: ☐ | TEMPERATURE CORRECTION FACTOR TO 20 °C

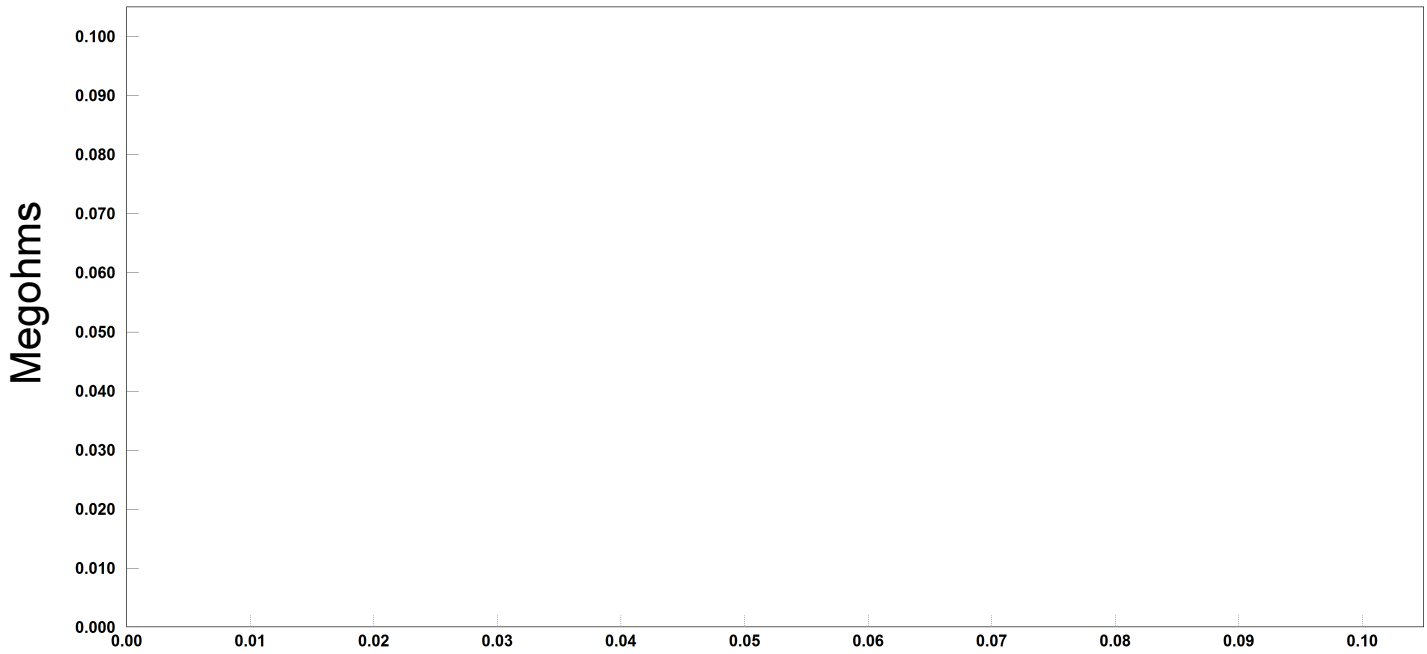
CORE/COIL TEMPERATURE °C | Use Instrument PI Value: ☐ | INSULATION TYPE DRY

MINUTES	PHASE A TO GROUND			PHASE B TO GROUND			PHASE C TO GROUND		
	READING (megohms)	TEMP. CORR. FACTOR	20°C READING (megohms)	READING (megohms)	TEMP. CORR. FACTOR	20°C READING (megohms)	READING (megohms)	TEMP. CORR. FACTOR	20°C READING (megohms)
0.25									
0.50									
0.75									
1.00									
2.00									
3.00									
4.00									
5.00									
6.00									
7.00									
8.00									
9.00									
10.00									
POLARIZATION INDEX									

POLARIZATION INDEX = 10 MINUTE READING / 1 MINUTE READING

TEST EQUIPMENT USED: | TESTED BY: Default Administrator

Polarization Index



PHASE A TO GROUND : Red Square

PHASE B TO GROUND : Blue Circle

PHASE C TO GROUND : Green Triangle

COMMENTS:	
DEFICIENCIES:	

GENERATOR TIP UP TEST

OWNER	Example Owner	PAGE	5
PLANT	Example Plant	AMBIENT TEMP. °F	DATE 10/10/2014
SUBSTATION	GENERATORS	HUMIDITY %	JOB # GENERATORS
POSITION	AUTOMATED	ASSET ID	

GENERATOR NAMEPLATE DATA:

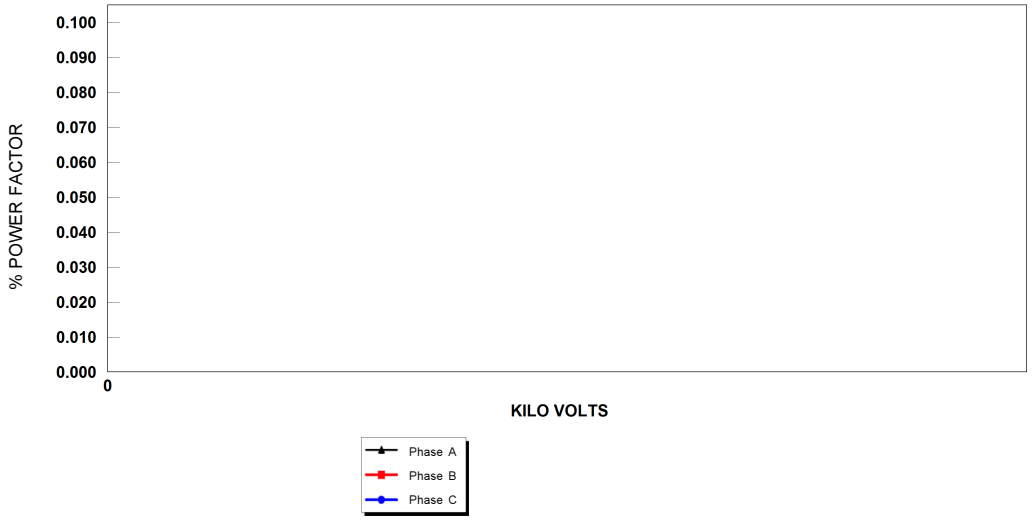
GENERATOR MFR.			MODEL NO.		S/N		
KVA	KW	VOLTS (KV)	AMPS	PHASE	FREQUENCY	RPM	
GENERATOR CONTROL MFR.			MODEL NO.		S/N		
GOVERNOR MFR.			YEAR MANUF.		TYPE	CHOOSE	
VOLTAGE REG. MFR.			FRAME TYPE		OTHER		

TEST FREQUENCY: *60*

Use T1, T2, T3

GROUNDED TIP UP TEST

	TEST ID	CIRCUIT DESCRIPTION	kV %	TEST kV	CAPACITANCE C (PF)	P.F. %	DIRECT		PF (%) TIP UP
						MEAS.	mA	WATTS	
TERMINAL 1	1	T1 GND T2, T3	25	2					
	2	T1 GND T2, T3	50	4					
	3	T1 GND T2, T3	75	6					
	4	T1 GND T2, T3	100	8					
TERMINAL 2	5	T2 GND T1, T3	25	2					
	6	T2 GND T1, T3	50	4					
	7	T2 GND T1, T3	75	6					
	8	T2 GND T1, T3	100	8					
TERMINAL 3	9	T3 GND T1, T2	25	2					
	10	T3 GND T1, T2	50	4					
	11	T3 GND T1, T2	75	6					
	12	T3 GND T1, T2	100	8					



TEST EQUIPMENT USED: _____ TESTED BY: Default Administrator

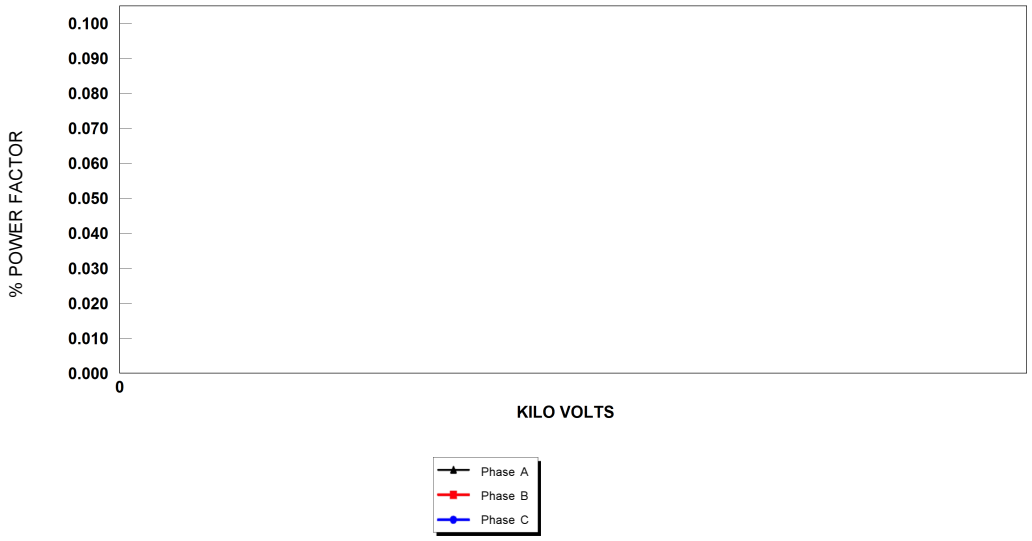
Serial Number: _____ Firmware Information: _____ Calibration Date: _____

GENERATOR TIP UP TEST

Use T1, T2, T3

UNGROUNDED TIP UP TEST

	TEST ID	CIRCUIT DESCRIPTION	KV %	TEST KV	CAPACITANCE C (PF)	P.F. %	DIRECT		PF (%) TIP UP
						MEASURED	mA	WATTS	
TERMINAL 1	13	T1 MES T2 GND T3	25	2					
	14	T1 MES T2 GND T3	50	4					
	15	T1 MES T2 GND T3	75	6					
	16	T1 MES T2 GND T3	100	8					
TERMINAL 2	17	T2 MES T1 GND T3	25	2					
	18	T2 MES T1 GND T3	50	4					
	19	T2 MES T1 GND T3	75	6					
	20	T2 MES T1 GND T3	100	8					
TERMINAL 3	21	T3 MES T1 GND T2	25	2					
	22	T3 MES T1 GND T2	50	4					
	23	T3 MES T1 GND T2	75	6					
	24	T3 MES T1 GND T2	100	8					



MULTIPLE QUICK TESTS

TEST NO	INSULATION TESTED	TEST MODE	SUPPRESS.	TEST kV	Test Freq	L(H) CAP.(pF)		POWER FACTOR %			DIRECT		%VDF	IR
								MEAS.	@ 20°C	CORR.	mA	WATTS		
1		UST-R	Off							1.000				

COMMENTS:

DEFICIENCIES:

SWITCHGEAR CHECK LIST

Your Company Logo

OWNER Example Owner | PAGE 7

PLANT Example Plant | AMBIENT TEMP. °F | DATE 10/10/2014

SUBSTATION GENERATORS | HUMIDITY % | JOB # GENERATORS

POSITION GENERAL | ASSET ID

NAMEPLATE DATA

MANUFACTURER | SERIAL NO. | DWGS.

VOLTAGE CLASS | TYPE

CONSISTING OF: | TOTAL BREAKERS | TOTAL INSTRUMENTS | TOTAL RELAYS | MOLDED CASE BREAKERS

EXTERNAL CONDITION: ○ GOOD ○ FAIR ○ POOR

GENERAL INSPECTION OF EXTERIOR OF EQUIPMENT		INSPECT BREAKER AND CELL CONTACTS	
INSPECT FOR DAMGE, BENT OR TWISTED DOORS		VACUUM AND CLEAN INTERIOR OF CUBICLES	
INSPECT DOOR HANDLES, LOCKING BARS AND MECHANISM		LUBRICATE DRAWOUT ASSEMBLY	
CHECK DOOR INTERLOCKS FOR PROPER OPERATION		CHECK CELL INTERLOCKS AND AUXILIARY CONTACT ASSEMBLIES	
CHECK CONTROL KNOBS AND SWITCHES FOR FREEDOM OF MOVEMENT AND CONTACT CONDITION		PERFORM BREKER INSPECTION AND TEST	
INSPECT FOR BROKEN INSTRUMENTS, RELAY COVER(S) AND GLASS		INSPECT AND PERFORM INSULATION TEST OF POWER CABLE / BUS TO GROUND	
INSPECT FOR PROPER GROUNDING OF EQUIPMENT		RESTORE CONTROL POWER TO SWITCHGEAR	
INSPECT BUS AND SUPPORT INSULATORS		CHECK RELAYS FOR POSITIVE TRIPPING	
CLEAN BUS INSULATORS		TEST ANNUNCIATOR-ALARM FOR TARGET	
DIELECTRIC TEST OF BUS WORK AND POTHEADS		CHECK PANEL LIGHTS FOR OPERATION: BURNED OUT / MISSING BULBS AND LAMP COVERS	
INSPECT CONTROL AND METERING TRANSFORMERS		OPERATE CLOSE AND TRIP BREAKER CONTROLS	
INSPECT AND CHECK INSTRUMENTS		CHECK AUTOMATIC TRANSFER OPERATION	
CHECK CONDITION OF WIRING AND TERMINAL CONNECTIONS		MAKE FINAL VISUAL INSPECTION: REMOVE LEADS, TOOLS, ETC.	
REMOVE DRAWOUT BREAKERS		NOTE AND REPORT ANY UNMARKED CIRCUITS	
CHECK RAILS, GUIDES, ROLLERS AND SHUTTER MECHANISM		REPORT UNSAFE CONDITIONS	

COMMENTS:

DEFICIENCIES:

TEST EQUIPMENT USED: | TESTED BY: Default Administrator

GENERATOR LOAD TEST REPORT

Your Company Logo

OWNER Example Owner | PAGE 8

PLANT Example Plant | AMBIENT TEMP. °F | DATE 10/10/2014

SUBSTATION GENERATORS | HUMIDITY % | JOB # GENERATORS

POSITION GENERAL | ASSET ID

NAMEPLATE DATA

GENERATOR MFR. | MODEL NO. | S/N

kVA | kW | VOLTS | AMPS | PHASE | CYCLES | RPM

GENERATOR CONTROL MFR. | MODEL NO. | S/N

GOVERNOR MFR. | MODEL NO. | S/N

VOLTAGE REG. MFR. | MODEL NO. | S/N

TEST RUN

TEST READING INTERVALS	START											
REAL TIME												
TARGET KILOWATT LOADING												
ENGINE SPEED - R.P.M.												
FREQUENCY - HERTZ												
ENGINE WATER °F												
RADIATOR WATER TEMPERATURE °F												
ENGINE OIL TEMPERATURE °F												
ENGINE OIL PRESSURE - PSI												
PANEL METER VOLTAGE READING												
MEASURED VOLTAGE												
PANEL METER AMPERE READING												
MEASURED AMPERES												
PANEL METER KILOWATT READING												
MEASURED KILOWATT READING												
BATTERY VOLTAGE												
FUEL PRESSURE												

FUEL MONITORING SYSTEM

VOLUME GAL. | ULLAGE GAL. | 90% ULLAGE GAL. | TC VOLUME GAL.

HEIGHT INCHES | WATER GAL. | WATER INCHES | TEMPERATURE °F

TIME

COMMENTS:

DEFICIENCIES:

TEST EQUIPMENT USED: | TESTED BY: Default Administrator

GENERATION SYSTEMS
SYSTEM STATUS AND SHUTDOWN TESTS

Your Company Logo

OWNER Example Owner | PAGE 9

PLANT Example Plant | AMBIENT TEMP. °F | DATE 10/10/2014

SUBSTATION GENERATORS | HUMIDITY % | JOB # GENERATORS

POSITION GENERAL | ASSET ID

NAMEPLATE DATA

MANUFACTURER | SERIAL NO. | TYPE

CATALOG NO. | SYSTEM VOLTAGE | AMPACITY

WIRING NO. | INSTALLED OPTIONS

DESCRIPTION	INSPECTED	CONDITION	CLEAN/LUBE
OVERALL CLEANLINESS	☐		
INSULATING MEMBERS	☐		
MECHANICAL CONNECTIONS	☐		

DESCRIPTION	INSPECTED	CONDITION	CLEAN/LUBE
ENVIRONMENTAL CONDITION	☐		
OPERATING MECHANISMS	☐		
	☐		

STATUS TITLE INDICATIONS	ALARM INITIATED			SIREN ACTIVATED			INDICATOR LAMP ACTIVATED		
GENERATOR NUMBER	1	2	3	4	5	6	7	8	9
CIRCUIT BREAKER OPEN									
CIRCUIT BREAKER CLOSED									
CIRCUIT BREAKER TRIP SHUTDOWN									
CIRCUIT BREAKER CLOSE FAILURE									
OVERCRANK SHUTDOWN*									
OVERSPEED SHUTDOWN*									
LOW OIL PRESSURE SHUTDOWN*									
HIGH OIL TEMPERATURE SHUTDOWN*									
HIGH WATER TEMPERATURE SHUTDOWN*									
HIGH EXHAUST TEMPERATURE SHUTDOWN*									
HIGH CRANKSHAFT PRESSURE*									
REVERSE POWER SHUTDOWN									
REVERSE VARS SHUTDOWN									
EMERGENCY STOP*									
HIGH WATER TEMPERATURE PRE-ALARM									
LOW WATER LEVEL PRE-ALARM*									
LOW WATER TEMPERATURE									
LOW OIL PRESSURE PRE-ALARM *									
HIGH EXHAUST TEMPERATURE PRE-ALARM *									
HIGH INLET AIR TEMPERATURE *									
LOW BOILER WATER LEVELS									
COMPRESSED AIR SHUTDOWN									
HIGH WATER LEVEL									
EMERGENCY WATER FEED									
FAILURE TO SYNCHRONIZE									
CONTROL VOLTAGE FAILURE									
CONTROLS NOT IN AUTOMATIC									
ENGINE RUNNING *									
AUTOMATIC START									
BATTERY CHARGER FAILURE									
PROGRAMMER LOGIC CONTROLLER STOPPED									
HIGH STEAM PRESSURE									
HIGH BATTERY VOLTAGE									
LOW BATTERY VOLTAGE									

* THE ALARM / SHUTDOWN WAS SIMULATED AT THE ENGINE GENERATOR AND VERIFIED AT THE SWITCHGEAR.

COMMENTS:

DEFICIENCIES:

TEST EQUIPMENT USED: | TESTED BY: Default Administrator

BI-ANNUAL
ENGINE-GENERATOR
PREVENTIVE MAINTENANCE REPORT

Your Company Logo

OWNER Example Owner | PAGE 10

PLANT Example Plant | AMBIENT TEMP. °F | DATE 10/10/2014

SUBSTATION GENERATORS | HUMIDITY % | JOB # GENERATORS

POSITION GENERAL | ASSET ID

GENERATOR NAMEPLATE DATA:

GENERATOR MFR. | MODEL NO. | S/N

kVA | kW | VOLTS | AMPS | PHASE | CYCLES | RPM

GENERATOR CONTROL MFR. | MODEL NO. | S/N

GOVERNOR MFR. | MODEL NO. | S/N

VOLTAGE REG. MFR. | MODEL NO. | S/N

ENGINE NAMEPLATE DATA:

MANUFACTURER | SERIAL NUMBER

AIR CLEANER	LOW	OK	HIGH	COMMENTS
AIR CLEANER ELEMENTS	○	○	○	
AIR CLEANER SEALS	○	○	○	
AIR CLEANER INDICATOR	○	○	○	

BATTERY SYSTEM	LOW	OK	HIGH	COMMENTS
CABLES AND CONNECTIONS	○	○	○	
CHARGER RATE	○	○	○	
CRANKING VOLTAGE DROP	○	○	○	
ELECTROLYTE LEVEL	○	○	○	
OVERALL VOLTAGE	○	○	○	
SPECIFIC GRAVITY OF EACH CELL	○	○	○	

LUBRICATION SYSTEM	LOW	OK	HIGH	COMMENTS
CLEAN CRANKCASE BREATHER VENT	○	○	○	
CLEAN PRIMARY FILTER	○	○	○	
CRANKCASE BLOWBY	○	○	○	
CRANKCASE OIL LEVEL WITH ENGINE OFF	○	○	○	
CRANKCASE OIL LEVEL WITH ENGINE RUNNING	○	○	○	
GOVERNOR OIL LEVEL	○	○	○	
LUBRICATE GENERATOR BEARING & FAN PULLY	○	○	○	
SAMPLE CRANKCASE OIL FOR LABORATORY TESTING	○	○	○	

BI-ANNUAL
ENGINE-GENERATOR
PREVENTIVE MAINTENANCE REPORT

EXHAUST & MECHANICAL SYSTEM	LOW	OK	HIGH	COMMENTS
ABNORMAL NOISE OR VIBRATION	○	○	○	
DRAIN MOISTURE TRAPS	○	○	○	
EXTERIOR OPENING COVER	○	○	○	
FLEXIBLE COUPLINGS	○	○	○	
INSULATING MATERIALS	○	○	○	
LOOSE BOLTS ON STRUCTURAL MOUNTINGS	○	○	○	
SUPPORTS	○	○	○	

FUEL SYSTEM	LOW	OK	HIGH	COMMENTS
CONDITION OF HOSES & PIPE FITTINGS	○	○	○	
DAY TANK ALARMS	○	○	○	
DAY TANK LEAKS	○	○	○	
DAY TANK PUMP	○	○	○	
DRAIN WATER & SEDIMENT	○	○	○	

GENERATOR	LOW	OK	HIGH	COMMENTS
AIR GAP	○	○	○	
COLLECTOR BRUSHES	○	○	○	
COLLECTOR RINGS	○	○	○	
DIRT / OIL / GREASE ACCUMULATION	○	○	○	
POWER FEEDER CONNECTIONS	○	○	○	
POWER FEEDER INSULATION TESTS	○	○	○	

GOVERNOR	LOW	OK	HIGH	COMMENTS
GOVERNOR OPERATION	○	○	○	
LINKAGE OPERATION	○	○	○	
OIL LEVEL	○	○	○	

RADIATOR	LOW	OK	HIGH	COMMENTS
AIR FLOW THROUGH CORE	○	○	○	
ANTIFREEZE & INHIBITOR STRENGTH	○	○	○	
CAP & SEAL	○	○	○	
COOLANT LEVEL - ENGINE HOT	○	○	○	
COOLANT LEVEL - ENGINE COOL	○	○	○	
FAN BELT CONDITION	○	○	○	
FAN BELT TENSION	○	○	○	
JACKET WATER HEATER OPERATING TEMPERATURE	○	○	○	
LEAKS - BEFORE RUNNING	○	○	○	
LEAKS - AFTER RUNNING	○	○	○	
LOUVER OPERATION	○	○	○	

BI-ANNUAL
ENGINE-GENERATOR
PREVENTIVE MAINTENANCE REPORT

WIRING - CONTROL	LOW	OK	HIGH	COMMENTS
AMMETER OPERATION	○	○	○	
AUTOMATIC / MANUAL MODE	○	○	○	
CONTROL RELAYS	○	○	○	
CRANK TERMINATION RESET	○	○	○	
CRANK TERMINATION TIME	○	○	○	
FREQUENCY METER OPERATION	○	○	○	
OIL PRESSURE	○	○	○	
PROPER OPERATION OF ALL PRE-ALARMS	○	○	○	
PROPER OPERATION OF ALL SHUTDOWNS	○	○	○	
TEMPERATURE GAUGE	○	○	○	
TERMINAL STRIP CONNECTIONS	○	○	○	
VOLTMETER OPERATION	○	○	○	

CORRECTIVE ACTION COMPLETED:

ADDITIONAL SERVICES REQUIRED:

COMMENTS:

DEFICIENCIES:

TEST EQUIPMENT USED: _____

TESTED BY: Default Administrator

GENERATION SYSTEMS
SYSTEM STATUS AND SHUTDOWN TESTS

Your Company Logo

OWNER	Example Owner		PAGE 13
PLANT	Example Plant	AMBIENT TEMP. °F	DATE 10/10/2014
SUBSTATION	GENERATORS	HUMIDITY %	JOB # GENERATORS
POSITION	GENERAL	ASSET ID	

NAMEPLATE DATA

MANUFACTURER		SERIAL NO.		TYPE	
CATALOG NO.		SYSTEM VOLTAGE		AMPACITY	
WIRING NO.		INSTALLED OPTIONS			

DESCRIPTION	INSPECTED	CONDITION	CLEAN/LUBE
OVERALL CLEANLINESS	☐		
INSULATING MEMBERS	☐		
MECHANICAL CONNECTIONS	☐		

DESCRIPTION	INSPECTED	CONDITION	CLEAN/LUBE
ENVIRONMENTAL CONDITIONS	☐		
OPERATING MECHANISMS	☐		
	☐		

STATUS TITLE INDICATIONS	ALARM INITIATED			SIREN ACTIVATED			INDICATOR LAMP ACTIVATED		
GENERATION NUMBER	1	2	3	4	5	6	7	8	9
LOW OIL PRESSURE PRE-ALARM *									
HIGH EXHAUST TEMPERATURE PRE-ALARM *									
HIGH INLET AIR TEMPERATURE *									
LOW BOILER WATER LEVELS									
COMPRESSED AIR SHUTDOWN									
HIGH WATER LEVEL									
EMERGENCY WATER FEED									
FAILURE TO SYNCHRONIZE									
CONTROL VOLTAGE FAILURE									
CONTROLS NOT IN AUTOMATIC									
ENGINE RUNNING *									
AUTOMATIC START									
BATTERY CHARGER FAILURE									
PROGRAMMER LOGIC CONTROLLER STOPPED									
HIGH STEAM PRESSURE									
HIGH BATTERY VOLTAGE									
LOW BATTERY VOLTAGE									

THE ALARM / SHUTDOWN WAS SIMULATED AT THE ENGINE GENERATOR AND VERIFIED AT THE SWITCHGEAR.

FORM 19200 (GENERATION SYSTEMS SYSTEM STATUS AND SHUTDOWN B1) MUST BE COMPLETED ALSO.

COMMENTS:
DEFICIENCIES:

TEST EQUIPMENT USED: _____ TESTED BY: Default Administrator

ANNUAL
ENGINE-GENERATOR
PREVENTATIVE MAINTENANCE REPORT

Your Company Logo

OWNER Example Owner PAGE 14

PLANT Example Plant AMBIENT TEMP. °F DATE 10/10/2014

SUBSTATION GENERATORS HUMIDITY % JOB # GENERATORS

POSITION GENERAL ASSET ID

GENERATOR NAMEPLATE DATA:

GENERATOR MFR. MODEL NO. S/N

kVA kW VOLTS AMPS PHASE CYCLES RPM

GENERATOR CONTROL MFR. MODEL NO. S/N

GOVERNOR MFR. MODEL NO. S/N

VOLTAGE REG. MFR. MODEL NO. S/N

ENGINE NAMEPLATE DATA:

MANUFACTURER SERIAL NUMBER

☐	CHECK RADIATOR CORE FOR PROPER AIR FLOW	
☐	CHECK COOLANT FOR ANTI-FREEZE PROTECTION AND INHIBITOR STRENGTH	
☐	CHECK COOLANT LEVEL, WITH ENGINE COOL AND WITH ENGINE HOT	
☐	CHECK RADIATOR CAP AND SEAL	
☐	VERIFY THAT JACKET WATER HEATER IS OPERATING PROPERLY	
☐	CHECK FOR COOLANT LEAKS BEFORE, DURING AND AFTER RUNNING ENGINE	
☐	CHECK LUBE OIL LEVEL WITH ENGINE OFF AND WITH ENGINE RUNNING	
☐	CHECK FAN BELT TENSION	
☐	CHECK CONDITION OF HOSES AND HOSE CLAMPS	
☐	CHECK CONDITION OF FLEXIBLE FUEL LINES	
☐	CHECK FUEL SYSTEM FOR LEAKS, AND CHECK DAY TANK PUMPS AND ALARMS	
☐	CHECK BATTERY SPECIFIC GRAVITY AND ELECTROLYTE LEVEL - RECORD	
☐	CHECK BATTERY VOLTAGE AND BATTERY CHARGER RATE - RECORD	
☐	CHECK BATTERY CABLES AND CONNECTIONS	
☐	CHECK EXHAUST SYSTEM, INCLUDING FLEXIBLE COUPLINGS, DRAIN MOISTURE TRAPS	
☐	CHECK AIR CLEANER ELEMENTS, SEALS, AND AIR CLEANER INDICATOR	
☐	CHECK TERMINAL STRIP CONNECTIONS	
☐	CHECK POWER FEEDER CONNECTIONS AT THE GENERATOR	
☐	CHECK INSULATION ON GENERATOR LEADS - PERFORM MEGGAR TEST - RECORD	
☐	CHECK FOR LOOSE RELAYS IN CONTROL PANEL	
☐	CHECK GOVERNOR OIL LEVEL (IF APPLICABLE)	
☐	CHECK GOVERNOR AND LINKAGE FOR PROPER OPERATION	

ANNUAL
ENGINE-GENERATOR
PREVENTATIVE MAINTENANCE REPORT

☐	CHECK AIR GAP ON GENERATOR	
☐	CHECK COLLECTOR RING AND BRUSHES	
☐	CHECK FOR OIL AND DIRT BUILD UP IN GENERATOR	
☐	CHECK GENERATOR INSTALLATION FOR LOOSE BOLTS, ETC.	
☐	CHECK CRANK TERMINATION TIME AND CRANKING VOLTAGE DROP - RECORD	
☐	CHECK ALL ENGINE INSTRUMENTS FOR PROPER OPERATION	
☐	CHECK FOR ABNORNAL NOISE OR VIBRATION	
☐	CHECK FOR PROPER LOUVER OPERATION, (WHERE APPICABLE)	
☐	VERIFY PROPER OPERATION OF ALL PRE-ALARMS AND SHUTDOWN DEVICES	
☐	CHECK CRANKSHAFT BLOWBY, AND CLEAN CRANKCASE BREATHER	
☐	VERIFY PROPER VOLTAGE AND FREQUENCY - RECORD	
☐	DRAIN WATER AND SEDIMENT FROM DAY TANK	
☐	LUBRICATE GENERATOR BEARING AND FAN PULLEY	
☐	CLEAN PRIMARY FILTER	
☐	TAKE OIL SAMPLE FOR DETAILED OIL ANALYSIS	
☐	CLEAN THE PRIMARY FUEL FILTER SCREEN AND REPLACE THE FUEL FILTER ELEMENTS	
☐	CHANGE LUBE OIL AND FILTERS	
☐	PERFORM A FOUR HOUR LOADBANK TEST AT FULL LOAD	
☐	CHECK THAT ALL SWITCHES ARE LEFT IN PROPER MODE	
☐		
☐		
☐		

CORRECTIVE ACTION TAKEN:

ADDITIONAL SERVICES REQUIRED:

COMMENTS:
DEFICIENCIES:

TEST EQUIPMENT USED: _____ TESTED BY: Default Administrator

CO-GENERATION SYSTEM
SYSTEM STATUS & SHUTDOWN TESTS

Your Company Logo

OWNER Example Owner | PAGE 16

PLANT Example Plant | AMBIENT TEMP. °F | DATE 10/10/2014

SUBSTATION GENERATORS | HUMIDITY % | JOB # GENERATORS

POSITION GENERAL | ASSET ID

NAMEPLATE DATA

MANUFACTURER | SERIAL NO. | TYPE

CATALOG NO. | SYSTEM VOLTAGE | AMPACITY

WIRING NO. | INSTALLED OPTIONS

DESCRIPTION	INSPECTED	CONDITION	CLEAN/LUBE
OVERALL CLEANLINESS	☐		
INSULATING MEMBERS	☐		
MECHANICAL CONNECTIONS	☐		

DESCRIPTION	INSPECTED	CONDITION	CLEAN/LUBE
ARC CHUTES	☐		
OPERATING MECHANISM	☐		
CONTACT SEQUENCE	☐		

INDICATION	ALARM INITIATED	SIREN ACTIVATED	INDICATOR LAMP ACTIVATED
EG-1 RUNNING			
EG-1 ON LINE			
EG-1 LOCKED OUT			
MANUAL PARALLEL AVAILABLE			
BUS OVERLOAD			
EG-2 RUNNING			
EG-2 ON LINE			
EG-2 LOCKED OUT			
PRI-2 LOAD SHED ACTIVE			
PRI-2 LOAD SHED BYPASSED			
EG-3 RUNNING			
EG-3 ON LINE			
EG-3 LOCKED OUT			
PRI-3 LOAD SHED ACTIVE			
PRI-3 LOAD SHED BYPASSED			
LOAD DEMAND OPERATION			
PLC STOPPED			
PLC BATTERY CHARGER FAILURE			
BUS OVER FREQUENCY			
BUS UNDER VOLTAGE			
BUS OVER VOLTAGE			
EMERGENCY OPERATION			
CO-GENERATION OPERATION			

COMMENTS:

DEFICIENCIES:

TEST EQUIPMENT USED: | TESTED BY: Default Administrator

GENERATOR

OWNER	Example Owner		PAGE 17
PLANT	Example Plant	AMBIENT TEMP. °F	DATE 10/10/2014
SUBSTATION	GENERATORS	HUMIDITY %	JOB # GENERATORS
POSITION	GENERAL	ASSET ID	

GENERATOR NAMEPLATE DATA:

MANUFACTURER _____ SERIAL NUMBER _____

VOLTAGE RATING _____ VOLTS WATTAGE RATING _____ KILOWATTS

ADDITIONAL INFORMATION: _____

ENGINE NAMEPLATE DATA:

MANUFACTURER _____ SERIAL NUMBER _____

TYPE ☐ DIESEL ☐ WATER ☐ NATURAL

ADDITIONAL INFORMATION: _____

MEASURED TEST RESULTS

TIME (hh:mm:ss)	POWER (KILOWATTS)	PHASE VOLTAGES A - B (VOLTS)	PHASE VOLTAGES B - C (VOLTS)	PHASE VOLTAGES C - A (VOLTS)	LINE CURRENTS A (AMPERES)	LINE CURRENTS B (AMPERES)	LINE CURRENTS C (AMPERES)	FRE-QUENCY (HERTZ)		

GENERATOR INSTRUMENT PANEL RESULTS

TIME (hh:mm:ss)	POWER (KILOWATTS)	PHASE VOLTAGES A - B (VOLTS)	PHASE VOLTAGES B - C (VOLTS)	PHASE VOLTAGES C - A (VOLTS)	LINE CURRENTS A (AMPERES)	LINE CURRENTS B (AMPERES)	LINE CURRENTS C (AMPERES)	FRE-QUENCY (HERTZ)	ENGINE HOURS	FUEL PRESS. (LBS.)	WATER TEMP. (° C)	OIL PRESS. (LBS.)

COMMENTS:

DEFICIENCIES:

TEST EQUIPMENT USED: _____ TESTED BY: Default Administrator