

PREVENTIVE MAINTENANCE DETAILS

Facility Name		Date	24-Apr-19
Room Location	Garage Level	Arrival Time	10a
PM Type	Annual	Tech Name	Mike/Larry
Service Plan	None	Plan Code	X

(1) Physical Inspection / Status

Primary Systems	Description	Model Number	Accessories
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INFORMATION			
↗ System 1	Liebert 6kva GXT3 Split Phase	GXT3-6000RT208	NO Bypass
↘ System 2	(4) Extended Run Cabinets	GXT3-144VBATT	

SYSTEM 1 DETAILS ↗

Model	Liebert 6kva GXT3 Split Phase	Input	120/208
Details	Feeds panel	Output	120/208
Serial#	1324801134BW013	Install Date	2013
Physical Checks	[X] Input Plugs Secure [X] XR battery Cables Tight [X] Output Cords Tight		
Current Status	OPERATIONAL - BAD BATTERIES		

SYSTEM 2 DETAILS ↘

Model	(4) Extended Run Cabinets	Input	144VDC
Details		Output	144VDC
Serial#	various	Install Date	2013
Physical Checks	[X] Input Plugs Secure		
Current Status	OPERATIONAL - BAD BATTERIES		

(2) Data Collection

OBSERVED LOAD & RUNTIME

	Load%	InputV	Batt%	Amps	Runtime
↗ Unit 1	>50%	208	100%	??	??
↘ Unit 2					

EVENTS

	Self Test	# outages	Last Fault	Netcard Notes
↗ Unit 1	??	??	??	??
↘ Unit 2				

NETCARD READINGS

↗ Unit 1	Not Connected
↘ Unit 2	No Netcard

HISTORY

	LOAD %	CURRENT
↗ Unit 1	No Data	??

Unit 2	No Data			
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	RUNTIME	CURRENT
Unit 1	No Data	??
Unit 2	No Data	

(3) Cleaning/Inspections

Other Cleaning Comments

Unit 1	Removed batteries, blew out chassis. Checked fans and vents	Both units in good condition
Unit 2	Checked batteries inside unit. Unit has no fans or other cleaning needs	

Conditional Checks	N/A	Visually Inspect Spare frame slots for damage
	X	Visually Inspect Rear PDU circuit breakers
	X	Visually Inspect Battery Trays
	X	Visually check for any moisture signs
	X	Visually check battery tray sockets for wear or damage
	N/A	Visually check power module sockets for wear or damage

(4) Batteries

Comments

EVENTS

	Volts	InputV	Batteries	Age	Notes
Unit 1	144	144.5	CSB HR1234WF2	5 years	EXPIRED
Unit 2	144	157.2	CSB HR1234WF2	5 years	EXPIRED

CEL CHECK - MHOS

tester

ELK BLT1

mHos is a reading of internal resistance, one of the best determinations of battery health

	Batt	Volts	Location	mHos	Results
Internal Pack	1	12.0	in string	48	Below Performance
Internal Pack	2	11.9	in string	47	Below Performance
Extended Run Pack 1	1	13.1	in string	210	Good
Extended Run Pack 1	2	13.3	in string	218	Good
Extended Run Pack 2	1	13.1	in string	212	Good
Extended Run Pack 2	2	13.1	in string	228	Good

(5) Commentary

FOUND DURING INSPECTION

UPS unit has original batteries that are over 5 years old now. Recommend replacing. Curiously the extended run packs also have the same older batteries, but they are actually much healthier. This suggests that most of your outages were short and never really drained the XR packs.

RECOMMENDATIONS

REPLACE all the batteries. Fully restored, you should have over 3hrs of runtime. Also, you should hookup the netcard. Valuable data such as battery health, runtime and outages can be logged and saved.

INSTALL a manual bypass. BY installing a manual bypass, if the system fails, you can quickly switch the power through the UPS to the panel.