



Data Center Emergency Power – Overview

The emergency backup power system for the College's Data Center is designed to provide uninterrupted power to all the servers and network gear housed in the data center on the 5th floor of MSS. The system is comprised of dual power supplies, split off of the Metro campus utility power feed from CEI. Each power supply consists of a diesel powered generator, UPS, Battery Array and PDU. These power supplies are labelled A-side and B-side thus providing split power to each critical server using a dual power supply configuration. Ideally each server has two power supplies with one powered by an A-side electrical panel and one powered by a B-side electrical panel. These panels are normally powered by utility power, however in the event of a loss of utility power, the UPS/Battery Array will provide continuous uninterrupted power while the generator is cycling up. Both generators are fueled by individual day tanks and share the main 2000 gallon sub-tank located outside of Plant Operations.

System Components

Unit	Area Protected
Generator-A	A-side Data Center panels Data Center CRAC-1, CRAC-2, CRAC-3, CRAC4 Metro CMDF Metro Public Safety
UPS-A	A-side Data Center panels ONLY
Generator-B	B-side Data Center panels Data Center CRAC-2, CRAC-5
UPS-B	B-side Data center panels

System Specifications

Unit	Make	Rating	Year Installed
Generator-A	Cummins	750kW (937kVA)	2004
Generator-B	Cummins	400kW (500kVA)	2013
ATS-B	Cummins	600A	2013
UPS-A	Mitsubishi	202.5kW (225kVA)	2013
UPS-B	Mitsubishi	202.5kW (225kVA)	2013
PDU-A	Cyberex	225kVA	2013
PDU-B	Cyberex	225kVA	2013
CRAC-1	Liebert	20 ton	2004
CRAC-2	Liebert	10 ton	1985
CRAC-3	Liebert	10 ton	1990
CRAC-4	Liebert	10 ton	1990
CRAC-5	Liebert	24 ton	2013