

UNIVERSITY OF WEST FLORIDA

Facilities Management

Pensacola, FL 32514-5750

July 14, 2005

Revised: February 5, 2020

STANDARD OPERATING PROCEDURE # FAC 6.003

Subject: Routine Emergency Generator (EG) Operation and Maintenance Checks

Purpose and Scope: To insure the reliability of the University of West Florida's emergency generators. These generators will, in the event of a power outage, start and switch to emergency power and provide safety lighting and power for equipment to the occupants of the following facilities:

Unit No.	Facility(ies) Served	kW	Fuel Oil Tank Size	Tag No. Model No.	Manufacturer Purchase Date
EG-01 ¹	B-2, Lift Station No. 1	60	200	D60FR54/LM645485	Katolight
EG-02 ¹	B-4, Science and Engineering	350	1,700	350DFEG-A028X57/A090230263	Cummins Power
EG-03 ¹	B-13, Science Offices and Laboratory	55	200	00074910 50R07J71/302045	Kohler 2006-Nov-08
EG-04 ¹	B-74, Pat Dodson Complex - Classrooms B-75, Pat Dodson Complex - Graduate Studies Offices B-76, Pat Dodson Complex - Offices/Labs B76A, College of Business Education Center	125	308	DSGAB-8100857/J110257425	Cummins Power 2012-Sept-01
EG-05 ¹	B-22, University Commons	600	2,000	LC7/G7A00593	Caterpillar
EG-06 ¹	B-32, John C. Pace Library	200	400	00074912 200DFAA/D940541281	Onan 2006-Nov-08
EG-07 ¹	B-40, Central Utility Plant B-12, Telephone Switch Room (Phones for Energy Plant) Lift Station #1 B-46, Housing B-84, Greenhouse	500	1,000	00074913 500REOZV/0779195	Kohler 2004-Feb-16
EG-08 ¹	B-44, Pump House Well No. 4	450	150	150REQZJE/2300093	Kohler
EG-09 ¹	B-47, Pump House Well No. 2 Traffic lights at University Parkway intersection	300	800	D300FRJ4T2/135310-0107	Katolight
EG-10 ¹	B-54, Fieldhouse	16	Natural Gas	000741910 SPV-160-1-1/D5-13-301	Gillette 2006-Dec-15
EG-11 ¹	B-56A, Sewage Lift Station No. 2 Traffic lights at Martin Hall intersection	150	400	00074914 97A2270-S/2034616	Olympian 2006-Nov-08
EG-12 ¹	B-58, Life Science Laboratory	200	450	WG300564/G50A10227	Onan 2006-Nov-08
EG-13 ¹	B-58A, Science Lecture/Laboratory	55	150	50REOZ/605208	Kohler 199-Jul-01
EG-14 ¹	B-72, Health, Leisure and Sports Facility	200	400	SDO200/2077968	Generac
EG-15 ¹	B-79, Information Technology Services	400	1,000	00074917 400REOZD/076140	Kohler 1996-Jul-18



EG-16 ¹	B-90, Facilities Services B-91, Maintenance /Parking Services B-94, University Police B-95, Central Receiving /Environmental Health & Safety Traffic lights at Village East intersection	400	800	400ROZD71/396323	Kohler
EG-17 ¹	B-88, WUWF Public Radio Station	150	800	00070471 150CB2/968572-1	DMT 1992-Jan-01
EG-18 ²	B-514, WUWF Midway Tower	125	295 300	D125FJJ4/123413-0406	Katolight
EG-19	B-19,	30	200	00068958 SD030 – K363OD18C	Generac 1996
EG-20	B-58C	450	1727	DFEJ-1863436/K180453668	Cummins Power 2018

¹Weekly Operation & Maintenance Checks, ²Monthly Operation & Maintenance Checks and Generators: Each Generator: 460-volt or 208-volt, three phase

Procedure: Routine EG operation and maintenance include the following:

Weekly Checks:

- 1. Inspect the battery and battery terminals for any signs of corrosion and/or damage. Repair as needed.
- 2. Inspect the fuel tank for fuel level and any signs of leaks/damage.
- 3. Check condition of the belts.
- 4. Check that all control lights are operating. Replace as needed.
- 5. Ensure that water jacket heater is operating to maintain jacket temperature.
- 6. Check that all breakers on the unit are in "NORMAL" position for operation.
- 7. Do general inspection of the total unit for any visible damage or problems.
- 8. Crank unit and allow it to run under "NO LOAD" setting for maximum of 15 minutes to ensure it will crank and run properly.
- 9. Once it has been shut down, do visual check again of total unit for any signs of problems or leaks.
- 10. Log in the data for the run into the proper log sheet for the individual generator located in the Operations Manager's office in Building 40.

Monthly Checks:

- 1. Inspect the battery and battery terminals for any signs of corrosion and/or damage. Repair as needed.
- 2. Inspect the fuel tank for fuel level and any signs of leaks/damage.
- 3. Check condition of the belts.
- 4. Check that all control lights are operating. Replace as needed.
- 5. Ensure that water jacket heater is operating to maintain jacket temperature.
- 6. Check that all breakers on the unit are in "NORMAL" position for operation.
- 7. Do general inspection of the total unit for any visible damage or problems.
- 8. Crank unit at transfer switch(es) and allow it to run under "LOAD" setting for maximum of 30 minutes not counting the cooled down cycle at the end of the run. This is required under NFPA 110 for all emergency generators.
- 9. Once it has automatically shut down, do visual check again of total unit for any signs of problems or leaks.



10. Log in the data for the run into the proper log sheet for the individual generator located in the Operations Manager's office in Building 40.

Annual checks will include load bank testing as set down under NFPA 110 code for Emergency Standby Generators.

Special Notes on Units Emergency Operations:

As with any piece of equipment, there are special things to not in its operation. The following are these type notes on specific units that need to be noted.

Building 22 Generator:

- 1. In case of campus power lose; this generator has to be cranked manually at the unit.
- Once cranked and running, check both feed breakers on unit that feed power to the building to make sure both are in "NORMAL" non-tripped position. Reset if either is tripped.
- 3. Go to main electrical room in building to main power panel. Unlock to Kurt-key lock on the main breaker and turn main breaker off.
- 4. On main panel, take key from main breaker after locking it and unlock the emergency feed breaker. Place the breaker in "ON" position.
- 5. Once "NORMAL" power has been restored to the building/campus, reverse the operation above on the main power panel.
- 6. Once all breakers are back in "NORMAL" position, manually shut down the generator.
- 7. Log down all the data from the generator run for the log book in the office.

Building 13 Generator:

- 1. In case of campus power lose; this generator has to be cranked manually at the unit.
- 2. Once cranked and running, check both feed breakers on unit that feed power to the building to make sure both are in "NORMAL" non-tripped position. Reset if either is tripped.
- 3. Go to main electrical room in building and manually transfer the power to the "EMERGENCY" feed on the transfer switch
- 4. Once "NORMAL" power has been restored to the building/campus, reverse the operation above.
- 5. Once transfer switch is back in "NORMAL" position, manually shut down the generator.
- 6. Log down all the data from the generator run for the log book in the office.

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