

Emergency Power Plan Guideline for 58AER17-1 and 59AER17-1

1. Basic information concerning the facility:

a. **Forest Oaks of Spring Hill:**

b. **Assisted Living /M/C:**

c. **AL7179:**

2. **Dining Area**

3. **2600 square feet**

4. **1-4 ton A/C unit and 1-5 ton A/C unit to Cool the area- HVAC**

5. **130 to 145**

6. Please provide a statement on how you plan to move residents to this location:

Executive Director or designee will assign staff to relocate residents to a predetermined location. Notification of residents of cooled areas of the community and assisting as needed.

7. Will beds be available in the cooled area?

a. *If yes, how many:* **-145 cots**

b. Are the beds located on site? **Stored in a central location offsite**

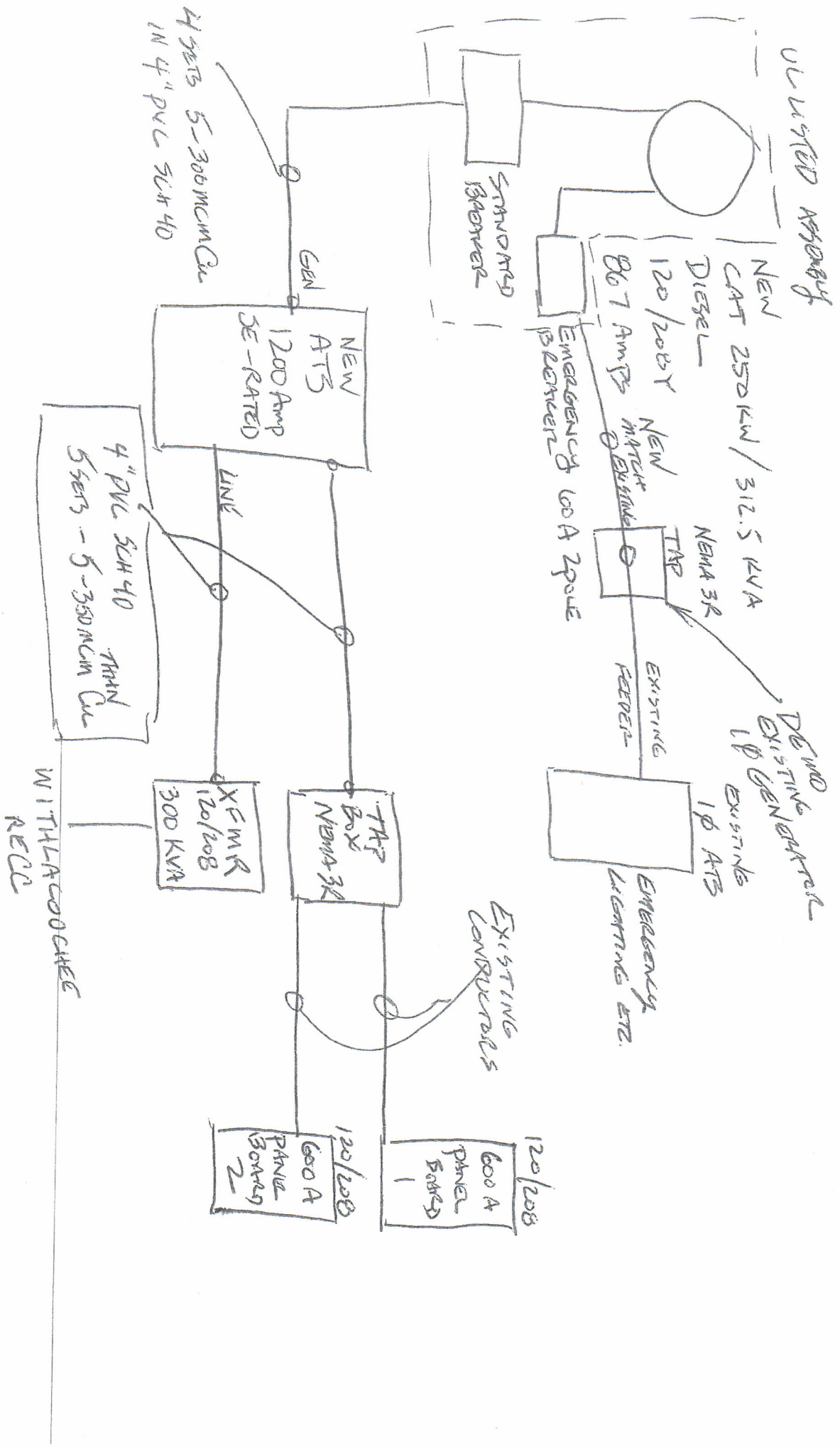
8. Describe how staff will ensure the area does not exceed 80 degrees and how often the temperature will be monitored:

Wall mounted thermostats will be used to monitor every hour for the duration of the outage.

9. Describe where the generator is located at your facility: **Holiday Retirement has contracted with Covenant Services, Inc. to provide assessment and recommendations for generator selection and installation. The plans and timeline are currently in process and will be submitted immediately upon receipt by Holiday.**
10. Describe make, model and size of generator(s). Is the generator fixed or portable? **See response #9**
11. If your facility is planning on installing a fixed generator, describe the construction. **Will follow the manufacturer's specs once the generators are selected.**
12. Describe what emergency features the generator is capable of powering (lights, fridge, A/C, etc.) **Fixed, entire community.**
13. Provide a maintenance schedule for both the generator and HVAC system (include mechanism for load testing and documentation of test): **Maintenance schedule will be provided once the new generator is installed. A schedule will be created based on generator manual specifications and implemented immediately. The HVAC system will have filter changes every 90 days and coil cleaned biannually.**
14. Describe the fuel type you will need to operate the generator: **See response #9**
15. Describe how you plan on storing 96 hours of fuel on-site: **See response #9**
16. State the procedure for how your facility will refuel before and after an emergency. If a fuel agreement is established, please provide the agreement: - **The community will monitor the fuel supply monthly and ensure a full tank is maintained. The community does not have a fuel agreement established as there was no demonstrated advantage to having an agreement during hurricane Irma. Instead the company has established a relationship with Sitefuel and they are on standby when refueling is necessary. During a power outage event, fuel supply will be monitored and documented every 12 hours. Refueling will be requested when the tank reduces to ¼ of a tank.**
17. Provide a training procedure to ensure staff is aware of how to operate the emergency power to the facility. **All staff will be in-serviced on the emergency power procedure, upon hire and annually thereafter**
18. Describe how new staff will be informed of the emergency power plan: (training upon hire, again annually in May prior to hurricane season and refreshers as needed with hurricane warnings) **All staff will be in-serviced on the emergency power procedure, upon hire and annually thereafter**

ONE LINE ELECTRICAL

#3 FOREST OAKS
of SPONG HILL



Load Calc Sheet

Site # 3
Name Forest Oaks of Spring Hill

Meter 60 416 854 166 KW highest demand from one year of Utility Bills

NEC 220.87 permits Load Calculation to be
125% of highest one year demand, therefore
Load= 166KW x 1.25=207.5 KW

Motor Loads over 10HP NONE

Fire pumps NONE

DATA below for RFQ do not transfer to CAD

Separate EMERGENCY LOAD BREAKER	250 KW Genset	Diesel	120/208Y
MAIN BREAKER	YES	60A 2 pole	
200 MPH Hurricane Enclosure	Standard	Note: Ground Fault not required for 120V to Neutral	
96 Hour Tank- Florida			
ATS	SE Rated	1200 A	120/208Y NEMA 3R or better

No	Facility Name	Address	City	Model	HW Rating	Comments	Fuel Consumption @ 100% Load	Complete Package Weight (lbs)	Complete Package Dimensions	Gross Weight (lbs)	Fuel Tank Weight (lbs)	Fuel Tank Dimensions	Fuel Tank Capacity 125 Hours @ 100% Load	Enclosure Dimensions	Enclosure Weight (lbs)
1A	Spring Haven Retirement	1225 NW Havendale Blvd	Winter Haven	C13	350	34.8 GPH	29,791	325" L x 80" W x 163" H	242" L x 80" W x 155" H	7,651	15,979	325" L x 80" W x 55" H	4,800 Gallons, 4,381 Usable	294" L x 80" W x 108" H	5,151
1B	Spring Haven Retirement	1225 NW Havendale Blvd	Winter Haven	C13	350	17,362	20,618	242" L x 80" W x 120" H	242" L x 80" W x 120" H	3,102	7,485	218" L x 80" W x 54" H	3,100 Gallons, 2,836 Usable	242" L x 80" W x 108" H	4,464
1C	Spring Haven Retirement	1225 NW Havendale Blvd	Winter Haven	D200-2	200	14.9 GPH	17,362	242" L x 80" W x 130" H	242" L x 80" W x 130" H	7,582	14,482	270" L x 80" W x 56" H	4,500 Gallons, 4,108 Usable	242" L x 80" W x 108" H	5,204
2	Lake Morton Plaza	4005 Florida Avenue	Lakeland	C18	600	42.7 GPH	40,411	390" L x 80" W x 164" H	242" L x 80" W x 155" H	15,472	11,068	218" L x 80" W x 54" H	2,000 Gallons, 1,837 Usable	242" L x 80" W x 108" H	3,145
3	Spring Oaks at Spring Hill	8055 Forest Oaks Blvd	Spring Hill	C9	250	19.4 GPH	19,855	242" L x 80" W x 130" H	242" L x 80" W x 130" H	5,088	9,117	218" L x 80" W x 54" H	3,100 Gallons, 2,836 Usable	242" L x 80" W x 108" H	3,335
4	Spring Oaks	7251 Grove Road	Brooksville	D200-2	200	14.9 GPH	17,362	242" L x 80" W x 130" H	242" L x 80" W x 130" H	4,910	9,117	227" L x 64" W x 46" H	2,100 Gallons, 1,917 Usable	242" L x 80" W x 108" H	4,405
5	The Grands	725 DuSoto Avenue	Brooksville	C9	250	19.4 GPH	19,855	242" L x 80" W x 130" H	242" L x 80" W x 130" H	5,088	10,362	227" L x 64" W x 46" H	2,100 Gallons, 1,917 Usable	242" L x 80" W x 108" H	4,405
6A	Bayshore Terrace East Service	9381 US 19	Pineville Park	C9	300	22.7 GPH	20,618	242" L x 80" W x 162" H	242" L x 80" W x 162" H	5,088	11,068	218" L x 80" W x 54" H	3,100 Gallons, 2,836 Usable	242" L x 80" W x 108" H	4,464
6B	Bayshore Terrace West Service	9381 US 19	Pineville Park	D150-2	150	11.0 GPH	17,362	242" L x 80" W x 120" H	242" L x 80" W x 120" H	3,102	7,485	212" L x 64" W x 36" H	1,500 Gallons, 1,359 Usable	242" L x 80" W x 108" H	3,009
7A	Bradenton Oaks	1015 7th Avenue East	Bradenton	C15	400	31.7 GPH	31,705	342" L x 80" W x 162" H	242" L x 80" W x 155" H	7,582	14,482	270" L x 80" W x 56" H	4,500 Gallons, 4,108 Usable	242" L x 80" W x 108" H	5,204
7B	Bradenton Oaks	1015 7th Avenue East	Bradenton	D175-4	175	13.5 GPH	15,472	242" L x 80" W x 130" H	242" L x 80" W x 130" H	4,910	9,117	218" L x 80" W x 54" H	2,000 Gallons, 1,837 Usable	242" L x 80" W x 108" H	3,145
8	Woodlands Village	3409 20th Street W	Bradenton	C9	300	22.7 GPH	20,618	242" L x 80" W x 162" H	242" L x 80" W x 162" H	5,088	11,068	218" L x 80" W x 54" H	3,100 Gallons, 2,836 Usable	242" L x 80" W x 108" H	4,464
9	Sunset Lake Village	1121 Jacaranda Avenue	Venice	D100-2	100	14.9 GPH	17,362	242" L x 80" W x 130" H	242" L x 80" W x 130" H	4,910	9,117	227" L x 64" W x 46" H	2,100 Gallons, 1,917 Usable	242" L x 80" W x 108" H	3,335
10	Sunset Lake Village	1121 Jacaranda Avenue	Venice	C13	350	22.7 GPH	20,618	242" L x 80" W x 162" H	242" L x 80" W x 162" H	5,088	11,068	218" L x 80" W x 54" H	3,100 Gallons, 2,836 Usable	242" L x 80" W x 108" H	4,464
11	Village Place Retirement	18400 Cochran Blvd	Fort Charlotte	C15	450	34.8 GPH	34,793	242" L x 80" W x 161" H	242" L x 80" W x 155" H	7,319	12,270	248" L x 80" W x 53" H	4,800 Gallons, 4,381 Usable	242" L x 80" W x 108" H	5,151
12	Royal Palm	2500 Aaron Street	Fort Myers	C9	250	19.4 GPH	19,855	242" L x 80" W x 130" H	242" L x 80" W x 130" H	5,088	10,362	227" L x 64" W x 46" H	2,100 Gallons, 1,917 Usable	242" L x 80" W x 108" H	4,405
13A	Barclay Place Senior Living	36 Barkley Circle	Fort Myers	C9	250	19.4 GPH	19,855	242" L x 80" W x 130" H	242" L x 80" W x 130" H	5,088	10,362	227" L x 64" W x 46" H	2,100 Gallons, 1,917 Usable	242" L x 80" W x 108" H	4,405
13B	Barclay Place Senior Living	36 Barkley Circle	Fort Myers	C13	350	24.9 GPH	24,693	242" L x 80" W x 161" H	242" L x 80" W x 155" H	7,319	12,270	248" L x 80" W x 53" H	5,500 Gallons, 5,180 Usable	242" L x 80" W x 108" H	5,774
14	Blumenthal Assisted Living	93 Bahama Drive	Lake Thaid	N/A	N/A	57.0 GPH	5,704	292" L x 80" W x 161" H	292" L x 80" W x 161" H	13,060	5,704	60" L x 80" W x 85" H	1,200 Gallons, 1,104 Usable	242" L x 80" W x 108" H	3,009
15	Isles of Vero Beach	1700 Waterford	Vero Beach	C7	750	53.6 GPH	50,283	374" L x 96" W x 189" H	374" L x 96" W x 189" H	13,060	29,261	405" L x 96" W x 55" H	7,500 Gallons, 6,766 Usable	374" L x 96" W x 114" H	2,402
16A	Ormond in the Pines	101 Clyde Morris Blvd	Ormond Beach	C9	300	22.7 GPH	20,618	242" L x 80" W x 162" H	242" L x 80" W x 162" H	5,088	11,068	218" L x 80" W x 54" H	3,100 Gallons, 2,836 Usable	242" L x 80" W x 108" H	4,464
16B	Ormond in the Pines	101 Clyde Morris Blvd	Ormond Beach	D200-2	200	10.0 GPH	13,218	242" L x 80" W x 130" H	242" L x 80" W x 130" H	4,910	9,117	227" L x 64" W x 46" H	2,100 Gallons, 1,917 Usable	242" L x 80" W x 108" H	3,335
16C	Ormond in the Pines	101 Clyde Morris Blvd	Ormond Beach	D125-8	125	10.0 GPH	13,218	242" L x 80" W x 130" H	242" L x 80" W x 130" H	4,910	9,117	227" L x 64" W x 46" H	2,100 Gallons, 1,917 Usable	242" L x 80" W x 108" H	3,335
17	Renaissance Retirement Center	300 W Airport Blvd	Sunford	D200-2	200	14.9 GPH	17,362	242" L x 80" W x 130" H	242" L x 80" W x 130" H	4,910	9,117	227" L x 64" W x 46" H	2,100 Gallons, 1,917 Usable	242" L x 80" W x 108" H	3,335

NEED SECOND REMOTE
 FUEL TANK 1,726 GALLONS
 OR LARGER PUMP
 TRANSFER PUMP FOR
 EXISTING
 KOHLER 600W

1,016 GALLON OR LARGER
 DOUBLE WALLED STORAGE
 TANK WITH FUEL
 TRANSFER PUMP FOR
 NORMAN REFUELING

Covenant Services, Inc.

18 Village Plaza, Shelbyville KY 40065
(502)471-4801

10/30/17

Rob Burch
Forest Oaks of Spring Hill
8055 Forest Oaks Blvd
Spring Hill, FL 34606

Mr. Burch,

We have visited your facility at your request and have prepared an Electrical Design to simplify your compliance with Florida Department of Elder Affairs Rule number 58AER17-1 Procedures Regarding Emergency Environmental Control for Assisted Living Facilities.

After reviewing your site layout and 12 months of Utility Demand readings , we have determined the least invasive and least cost alternative is to provide you with a Standby Emergency Generator capable of supplying your entire facilities' electrical load. The proposed generator includes a fuel tank designed to provide 96 hours of runtime at 100% load, which will exceed the mandatory run capacity as the generator will not be required to operate at 100% load.

Attached please find our proposal and equipment data sheets, which when signed along with a mutually agreed upon General Services Agreement and upon receipt of a 50% Material and Mobilization deposit, shall constitute a complete contract.

Equipment is custom built to order and is estimated to require 15 to 17 weeks to deliver, however permitting and construction of concrete pads, conduit and installation of the Automatic Transfer Equipment can commence prior to delivery of the Genset. Our estimation for total project completion is 22 weeks from receipt of the Deposit.

Best Regards,

Chris Curry

Covenant Services, Inc

18 Village Plaza, PMB 230
Shelbyville, KY 40065
(502)471-4801

Proposal

Oct 29th, 2017

Robert Burch
Forest Oaks of Spring Hill
8055 Forest Oaks Blvd
Spring Hill, FL 34606

250KW CAT Diesel w/96 Hour tank 1200 Amp ATS

Regarding the above subject, we are pleased to provide the following detailed proposal: Installed turnkey including Permits and Inspections by Florida Fully Licensed Electrical Contractor. Traffic protection measures and fuel tank permit included. Fuel included.

One new Caterpillar Model C9 Diesel Fueled Electric Generator Set, UL2200 Listed, engine directly connected to a Single bearing synchronous generator, 60Hz, 3 Phase, 1800RPM, **250kW** standby with fan, 208/120VAC, and Automatic Transfer Switch; included per the attached Bill of Material: TOTAL NET PRICE All included.....\$267,000

- **Price includes UL142 Rated 96 Hour Run-Time** Subbase Fuel Tank - Price includes **High Velocity Hurricane Zone 200MPH Wind Rated Sound Attenuated Enclosure** - Price includes platform with rails and stairs - Price includes 2-Year Warranty Coverage

DRAWINGS: 2 to 3 weeks after receipt of order DELIVERY: 15 to 17 weeks after approval of submittal and order is placed TERMS: Net due upon substantial completion with 1.5 percent per month added to the unpaid balance QUOTATION VALIDITY: 30 days

A CAT Power Systems Product Representative will be available for assistance during the installation of this equipment. The Product Representative will arrange start-up of the unit, and provide training and instruction to owner's personnel at the jobsite in its operation and maintenance. All service and parts for this unit will be provided from our Louisville location.

Thank you very much for allowing us an opportunity to quote on this project. Should you have any questions regarding our proposal, please don't hesitate to contact me.

We propose to provide materials, labor and equipment, complete according to the above specifications for the sum of:

\$267,000

Two hundred sixty-seven thousand dollars

Acceptance of Proposal: The above prices, specifications, and conditions are found to be satisfactory and are hereby accepted. Covenant Services, Inc is authorized to do the work as specified. Payment will be made as outlined above.

Signature: _____

Print Name: _____

Date of Acceptance: _____

Respectfully submitted,
Covenant Services, Inc
Chris Curry
(502)471-4801 Kwsave@yahoo.com
Oct 29th, 2017

This proposal is valid for 30 days

BILL OF MATERIAL

Caterpillar Model Diesel Fueled Electric Generator Set, UL2200 Listed, engine directly connected to a Single bearing synchronous generator, 60Hz, 3 Phase, 1800RPM, Standby with fan, and to include the following attachments and accessories:

STANDARD EQUIPMENT

Air cleaner, single stage dry type
Breather, crankcase
Battery charging alternator
Cooler, lube oil
Fuel filter(s)
Lube oil filter(s)
Lubricating oil
Fuel pressure gauge
Exhaust, manifold dry type
Fuel transfer pump, diesel models
Fuel priming pump, diesel models
Jacket water pump
Flexible fuel lines
Governor allowing a frequency regulation of +/- 0.25% no load to full load steady state
Voltage Regulation +/- 0.5% no load to full load steady state
Radiator, engine mounted with duct adapter and of sufficient capacity to maintain a safe operating temperature including anti-freeze
Vibration isolators - mounted between the formed steel base and the engine generator set
Formed steel base with coolant and oil drain valve connections.

EXHAUST SILENCER

Silencer for critical applications, mounted inside generator Weather Protective Sound Attenuated Enclosure
Flexible exhaust fitting mounted

ELECTRIC STARTING SYSTEM

24VDC
Battery consisting of Heavy-duty 12 volt Batteries with acid, rack and cables
Battery Charger, 120/240volt AC input, 24VDC output, dual rate, rated at 10 or 20 amperes and includes a low voltage alarm relay, complies with NFPA110 mounted and wired.
Battery Heating Pads thermostatically controlled, AC single phase

JACKET WATER HEATER

Thermostatically controlled, AC single phase, with isolation valves, mounted and wired to common terminal strip with battery charger

LUBE OIL HEATER

No Lube Oil Heater

GENERATOR FEATURES

Generator anti-condensing heater
Generator Excitation - Permanent Magnet Type with 300% short circuit
Circuit breaker(s) are UL Listed 100% rated generator mounted in NEMA 1 enclosure with Shunt Trip and Auxiliary Contacts

CONTROL PANEL, CATERPILLAR EMCP 4.2 GENERATOR MOUNTED in NEMA 1 ENCLOSURE

Digital graphical display for power metering, protective relaying, engine and generator controls, diagnostics, and operating information. All information available via the control panel keypads. A 33 x 132 pixel, 3.8 inch graphical display denotes text alarm, event descriptions, set points, engine, and generator

monitoring.

Real time clock allows for date and time stamping of diagnostics and events, as well as service maintenance requirements based on engine operating hours or calendar days. Up to 40 diagnostic events are stored in the non-volatile memory. Three levels of operator security.

GENERATOR MONITORING

Voltage (L-L, L-N)

Current (Phase)

Average Volt, Amp, Frequency

KW, KVAR, KVA (Average, Phase)

KW-HR, KVAR-HR (Total)

Excitation voltage and current (with CDVR)

Generator stator and bearing temp (with optional module)

GENERATOR PROTECTION

Over/under voltage

Over/under frequency

Generator phase sequence

Reverse power (real and reactive)

Overcurrent (timed and inverse)

ENGINE MONITORING

Coolant temperature

Oil temperature

Oil pressure

Engine speed (RPM)

Battery voltage

Run hours

Crank attempt and successful start counter

Enhanced engine monitoring (with electronic engines)

ENGINE PROTECTION

Control switch not in auto (alarm)

High coolant temp (alarm and shutdown)

Low coolant temp (alarm)

High engine oil temp (alarm and shutdown)

Low, high, and weak battery voltage

Overspeed

Overcrank

CONTROL

Run/Auto/Stop control

Speed and voltage adjust

Local and remote emergency stop

Remote start/stop

Cooldown timer

Cycle crank

INPUTS AND OUTPUTS

Two dedicated digital inputs

Six programmable digital inputs

Six programmable form A dry contacts

Two programmable form C dry contacts

Two digital outputs

COMMUNICATIONS

Primary and accessory CAN data links

RS-485 annunciator data link

RS-485 SCADA (Modbus RTU)

PRE-ALARM PANEL

Control Panel local mounted complies with NFPA110

REMOTE ANNUNCIATOR PANEL (DELIVERED WITH GENERATOR)

Caterpillar Remote Annunciator
Annunciation 16 points with two LED's each
Additional pair of LED's provides status of communication network
Alarm horn with lamp test and alarm acknowledge pushbuttons
Complies with NFPA 110
Shipped Loose for Contractor Mounting & Wiring

REMOTE E-STOP (DELIVERED WITH GENERATOR)

HIGH VELOCITY HURRICANE ZONE SOUND ATTENUATED WEATHER PROTECTIVE ENCLOSURE & SUB-BASE FUEL TANK

Weatherproof enclosure is constructed of aluminum material mounted on 96 hour runtime at 90% low fuel level, subbase fuel tank with aluminum frame, aluminum angle base, fixed intake louver, gravity radiator discharge louvers, hinged access doors, stainless steel t-handle latches and continuous hinge.

Fuel Provided by Others

JOBSITE START-UP - Cat Power Systems will supply a factory trained technician, to perform an installation check, start-up, and building load test of equipment supplied in this proposal, after installation is completed

JOBSITE LOAD BANK TESTING - 4-hour site load bank test. Load bank, cabling, and technician provided by local Certified Caterpillar Dealership

PERSONEL TRAINING - provided

O & M MANUALS - 1 set

SUBMITTAL DRAWINGS - Electronic and 4 hard copy sets or as needed

WARRANTY- Standard 2-year warranty provided for Caterpillar supplied equipment

NOTE: Any NETA and/or infrared site testing and/or electrical coordination study specified is NOT included in this proposal, and is to be provided by others



C9

250 ekW/ 313 kVA/ 60 Hz/ 1800 rpm/ 480 V/ 0.8 Power Factor

Rating Type: STANDBY

Emissions: U.S. EPA Certified for Stationary Emergency Use Only (Tier 3 Nonroad Equivalent Emission Standards)

C9

250 ekW/ 313 kVA
 60 Hz/ 1800 rpm/ 480 V

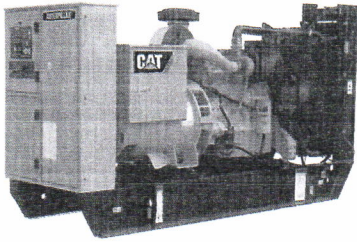


Image shown may not reflect actual configuration

Metric English

Package Performance		
Genset Power Rating with Fan @ 0.8 Power Factor	250 ekW	
Genset Power Rating	313 kVA	
Aftercooler (Separate Circuit)	N/A	N/A

Fuel Consumption		
100% Load with Fan	73.3 L/hr	19.4 gal/hr
75% Load with Fan	58.8 L/hr	15.5 gal/hr
50% Load with Fan	43.8 L/hr	11.6 gal/hr
25% Load with Fan	27.4 L/hr	7.3 gal/hr

Cooling System ¹		
Engine Coolant Capacity	13.9 L	3.7 gal

Inlet Air		
Combustion Air Inlet Flow Rate	25.2 m ³ /min	889.8 cfm
Max. Allowable Combustion Air Inlet Temp	50 ° C	122 ° F

Exhaust System		
Exhaust Stack Gas Temperature	455.5 ° C	852.0 ° F
Exhaust Gas Flow Rate	63.6 m ³ /min	2245.6 cfm
Exhaust System Backpressure (Maximum Allowable)	10.0 kPa	40.0 in. water



C9

250 kW/ 313 kVA/ 60 Hz/ 1800 rpm/ 480 V/ 0.8 Power Factor

Rating Type: STANDBY

Emissions: U.S. EPA Certified for Stationary Emergency Use Only (Tier 3 Nonroad Equivalent Emission Standards)

Heat Rejection		
Heat Rejection to Jacket Water	104 kW	5928 Btu/min
Heat Rejection to Exhaust (Total)	277 kW	15772 Btu/min
Heat Rejection to Aftercooler	82 kW	4686 Btu/min
Heat Rejection to Atmosphere from Engine	18 kW	1004 Btu/min
Heat Rejection to Atmosphere from Generator	20 kW	1120 Btu/min

Alternator ²	
Motor Starting Capability @ 30% Voltage Dip	543 skVA
Current	376 amps
Frame Size	LC5014H
Excitation	SE
Temperature Rise	150 ° C

Emissions (Nominal) ³		
NOx	1516.2 mg/Nm ³	2.9 g/hp-hr
CO	172.8 mg/Nm ³	0.4 g/hp-hr
HC	37.7 mg/Nm ³	0.1 g/hp-hr
PM	32.6 mg/Nm ³	0.1 g/hp-hr

DEFINITIONS AND CONDITIONS

1. For ambient and altitude capabilities consult your Cat dealer. Air flow restriction (system) is added to existing restriction from factory.
2. UL 2200 Listed packages may have oversized generators with a different temperature rise and motor starting characteristics. Generator temperature rise is based on a 40° C ambient per NEMA MG1-32.
3. Emissions data measurement procedures are consistent with those described in EPA CFR 40 Part 89, Subpart D & E and ISO8178-1 for measuring HC, CO, PM, NOx. Data shown is based on steady state operating conditions of 77° F, 28.42 in HG and number 2 diesel fuel with 35° API and LHV of 18,390 btu/lb. The nominal emissions data shown is subject to instrumentation, measurement, facility and engine to engine variations. Emissions data is based on 100% load and thus cannot be used to compare to EPA regulations which use values based on a weighted cycle.

Equipment**Engine****Air Cleaner**

- Single Element
- Dual Element
- Heavy Duty

Muffler

- Industrial grade (10 dBA)
- Residential and Critical grade (25 dBA)

Starting / Charging

- 24-Volt Electric Starting Motor
- Charging Alternator
- Standard Battery Set
- Oversize Battery Set

Control System**Controller**

- EMCP 4.2
- EMCP 4.4
- Local Annunciator
- Remote Annunciators
- Discrete I/O Module
- Device Server
- Volt Free Contact
- Earth (Ground) Fault Relay

Generator

- Excitation – Self
- Excitation – Internal / AREP
- Excitation – PMG
- Oversize
- Coastal Protection (CIP)
- Space Heater Control

Output Voltage

60 Hz

- 600V ○ 240V
- 480V ○ 208V

Power Termination

- Power Terminal Strips

Circuit Breakers

- 3-Pole 100% Rated – Single (Manual)
- 3-Pole 100% Rated – Single (Motorized)
- 3-Pole 100% Rated – Dual (Manual)
- 3-Pole 100% Rated – Third (Manual)
- External Paralleling
- Auxiliary Contacts
- Neutral Bar

Enclosure

- Weather Protective
- Sound Attenuated

Certification

- EPA Stationary Emergency Use
- UL2200 Listed
- CSA 22.2
- Certification of Compliance – IBC Seismic
- Certification of Compliance – IBC Seismic and OSHPD

Extended Service Coverage

- 2 Year
- 3 Year
- 4 Year
- 5 Year
- 10 Year

Base / Fuel Tank

- Narrow Skid
- Wide / Standard
- Sub Tank Base – UL & ULC Listed
- Integral Tank Base – UL & ULC Listed
- Spill Containment
- Overfill Prevention Valve
- Audio & Visual Fuel Alarm

Governing

- Cat Electronic Governor

Protection

- Safety Shutoff – High Water Temperature
- Safety Shutoff – Low Oil Pressure
- Safety Shutoff – Overspeed
- Coolant Level Sensor

Legend ● = Basic / Mandatory (without charge)
○ = Option



60Hz Ratings

Standby Rating ekW	Prime Rating ekW	Nominal Weight (Dry) ¹		Premium Weight (Dry) ²	
		kg	lb	kg	lb
200	180	2157	4755	2692	5935
250	225	2248	4956	2692	5935
300	275	2313	5100	2908	6411

¹Estimated weight includes standard generator, narrow skid base and heaviest mechanically operated standard single circuit breaker.

²Estimated weight includes oversize generator, wide skid base and heaviest circuit breaker configuration.

Rating Definitions

Standby

Output available with varying load for the duration of the interruption of the reliable source power. Standby power in accordance with ISO 8528.

Prime

Output available with varying load for an unlimited time. Prime power in accordance with ISO 8528. 10% overload power in accordance with ISO 8528.

www.Cat-ElectricPower.com

©2016 Caterpillar

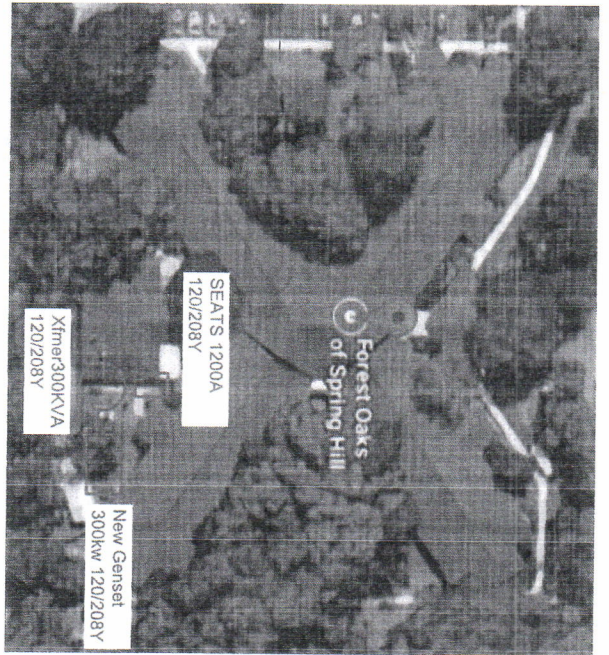
All rights reserved.

Materials and specifications are subject to change without notice.

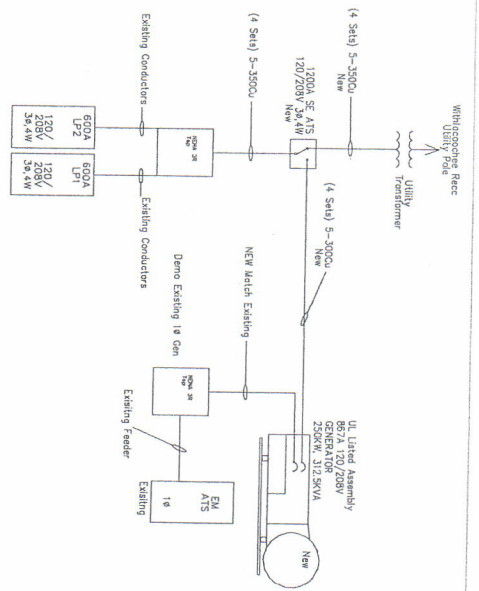
The International System of Units (SI) is used in this publication.

CAT, CATERPILLAR, their respective logos, ACERT, ADEM, S•O•S, "Caterpillar Yellow", the "Power Edge" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

Site



Single Line



Load Calc Sheet

Site # 3
 Name Forest Oaks of Spring Hill
 Meter 60 416 854
 166 KW highest demand from one year of Utility Bills

Motor Loads over 10HP NONE
 NEC 220.87 permits Load Calculation to be 125% of highest one year demand, therefore Load = 166KW x 1.25=207.5 KW

Fire pumps NONE

Load Calculation

ELECTRICAL NOTES:

- * ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NEC, ALL APPLICABLE CODES AND LOCAL ORDINANCES.
- * ELECTRICAL SERVICE AND ALL PANELS ARE EXISTING, VERIFY LOCATION AND CAPACITY IN FIELD.

PROPERTY OF COVENANT SERVICES INC. UNAUTHORIZED REPRODUCTION PROHIBITED. THIS DOCUMENT IS THE PROPERTY OF COVENANT SERVICES INC. AND IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. WITHOUT THE WRITTEN PERMISSION OF COVENANT SERVICES INC.

DATE:	02/29/2017
DRAWN BY:	BAW
CHECKED BY:	CS
APP. NO.:	98317-2

PROPOSED FACILITY FOR:
Forest Oaks of Spring Hill
 8055 Forest Oaks BLVD
 Spring Hill, FL 34606

Covenant Services Inc
 18 Weege Plaza
 Shelyville, KY 40066 (502)471-4521

DATE	ISSUE
02/16/17	1ST ISSUE OF DRAWING