



MONITORING & TESTING

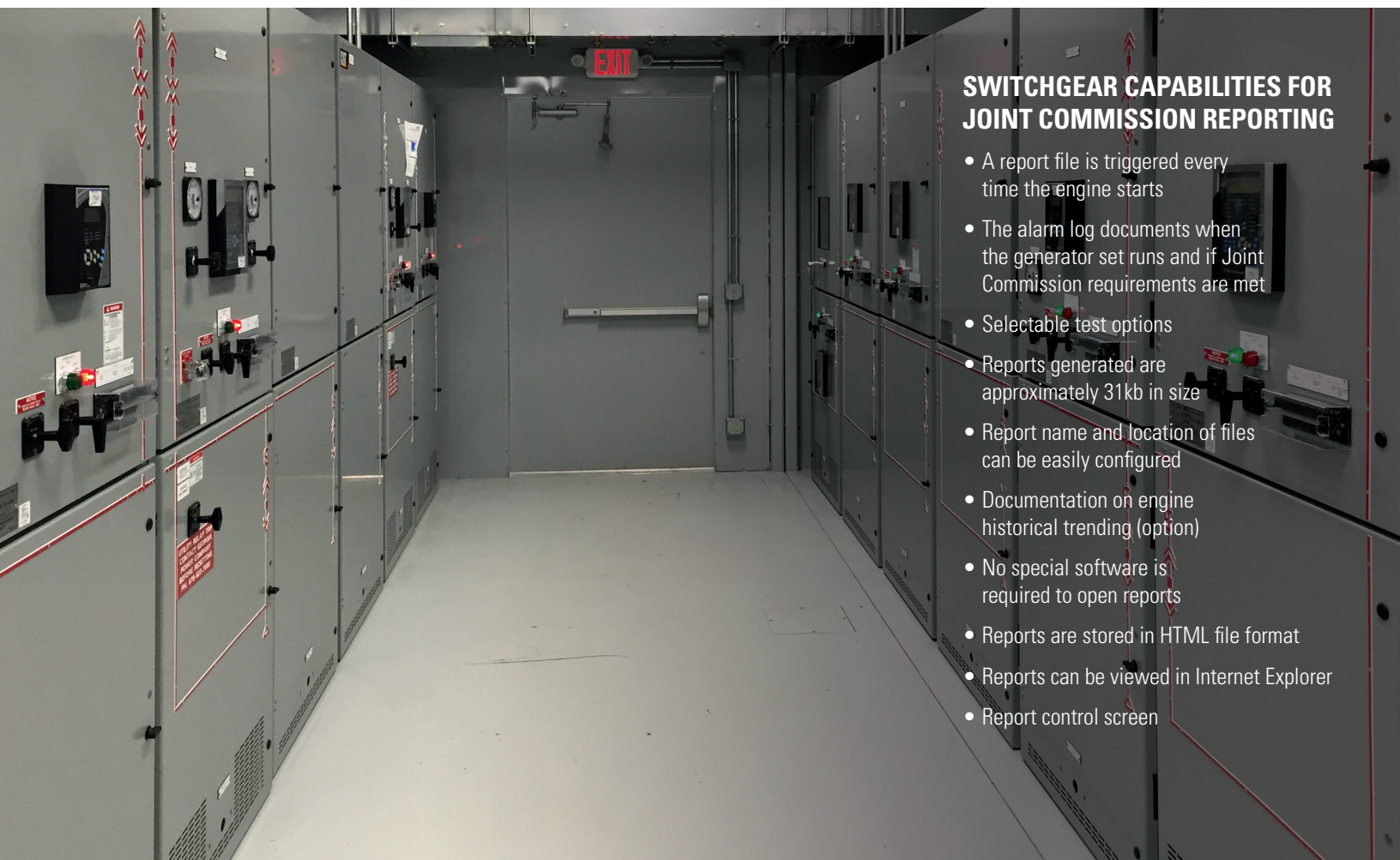
**BUILT FOR
HEALTHCARE**

CAT SOLUTIONS FOR JOINT COMMISSION REPORTING

When you make Cat Electric Power your single source for emergency power, you get the advantage of products and components designed to work together. Let Caterpillar not only defend your labs, imaging equipment, life and critical branch circuits, but also provide you with the solutions to meet Joint Commission standards and stay in compliance.

The Joint Commission requires weekly inspections, monthly tests, annual tests, and triennial tests of the Emergency Power Supply System, to ensure the system is operating properly and is prepared for an emergency power event. Automatic Transfer Switches (ATS) must also be tested monthly and inspected annually.

Caterpillar provides solutions for customers to create a Joint Commission test report, which is ready to deliver to inspectors.



SWITCHGEAR CAPABILITIES FOR JOINT COMMISSION REPORTING

- A report file is triggered every time the engine starts
- The alarm log documents when the generator set runs and if Joint Commission requirements are met
- Selectable test options
- Reports generated are approximately 31kb in size
- Report name and location of files can be easily configured
- Documentation on engine historical trending (option)
- No special software is required to open reports
- Reports are stored in HTML file format
- Reports can be viewed in Internet Explorer
- Report control screen

SOFTWARE AND REPORTING FEATURES

REPORTING FEATURES

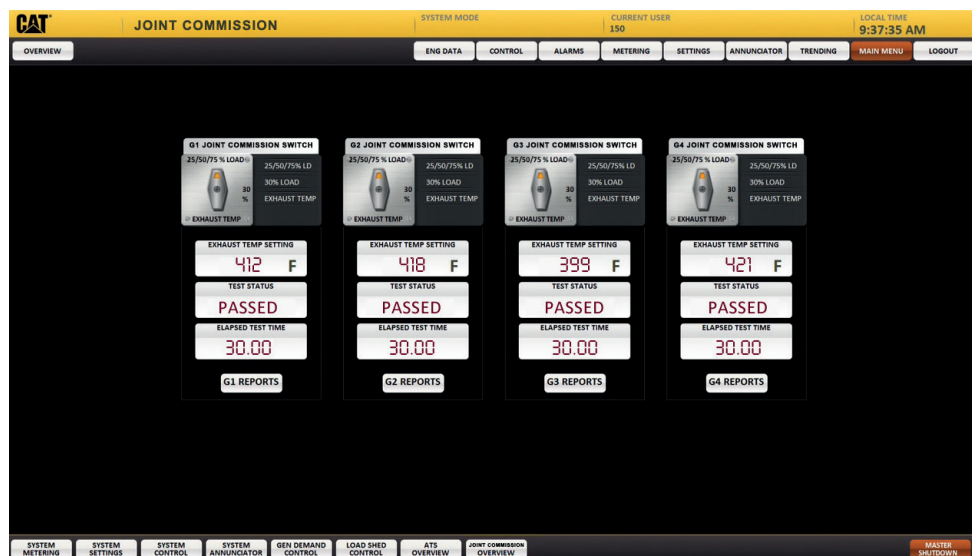
- Individual report screens for each generator set in the system
- Date and time stamps
 - Test initiated
 - Test completed
 - Generator set parameters at various test stages
- Generator statistics
 - Voltage (phase to phase)
 - Current (phase)
 - Frequency
 - Output
 - After coolant temperature
 - Exhaust temperature
 - Oil pressure
 - Filtered oil pressure
 - Engine speed
 - Engine load
- Generator parameters at time of:
 - Run request
 - Output circuit breaker closure
 - Start of test
 - Completion of each stage
- Test status (active, inactive, pass)

December 16, 2015 at 8:22:08 PM EST		Run Request	CB Closed	Start Of Test	Stage 1 Complete	Stage 2 Complete	Stage 3 Complete
Description	Value	Value	Value	Value	Value	Value	Value
Voltage A - B	volts	0.00	13,347.00	13,273.00	13,255.00	13,207.00	13,214.00
Voltage B - C	volts	0.00	13,343.00	13,268.00	13,251.00	13,159.00	13,184.00
Voltage C - A	volts	0.00	13,342.00	13,278.00	13,257.00	13,114.00	13,191.00
Amps A	amps	0.00	0.00	21.82	21.85	46.74	68.98
Amps B	amps	0.00	0.00	21.83	21.85	46.91	69.14
Amps C	amps	0.00	0.00	21.81	21.84	47.07	69.10
Frequency	Hz	0.00	60.00	60.00	60.01	60.01	60.03
Kilowatts	kW	0.00	0.00	501.00	545.00	1,068.00	1,577.00
After Coolant Temp	Deg	86.03	96.16	99.24	125.40	134.00	138.00
Exhaust Temp 1	Deg	91.14	103.24	108.12	775.58	798.08	816.93
Exhaust Temp 2	Deg	90.76	102.95	108.01	769.40	797.25	814.74
Oil Pressure	psi	0.00	53.4	54.60	54.90	55.40	56.00
Filtered Oil Pressure	psi	0.00	52.7	54.20	53.70	54.95	55.85
Engine Speed	rpm	0.00	1,800.00	1,800.00	1,800.00	1,800.00	1,800.00
Engine Load	%	0.00	0.00	25.00	27.20	53.04	78.09

Joint Commission report

SOFTWARE FEATURES

- Generator set "type" test selection
 - 25/50/75% load (annual test)
 - 30% load (monthly or 3 year test)
 - Exhaust temperature (alternative to 30% load test)
- Minimum exhaust temperature setting
- Test status (active, inactive or pass)
- Elapsed test time



Test control screen

JOINT COMMISSION REQUIREMENTS

GENERATOR SET TESTING WEEKLY INSPECTION

• FUEL

- Day tank fuel level
- Main tank fuel level
- Day tank float switch (check)
- Piping hoses and connectors (check)
- Operation fuel pressure (pull from engine)
- Obstructions to tank vents and overflow piping (check)

• OIL

- Oil level
- Oil pressure
- Lube oil heater (check)

• COOLING SYSTEM

- Coolant level (manual entry)
- Water pumps (check)
- Jacket water heater
- Belts/Hoses/Fan (check)

• EXHAUST SYSTEM

- Drain condensate trap (check)

• BATTERY SYSTEM

- Corrosion (check)
- Battery specific gravity (manual input)
- Electrolyte level (manual input)
- Battery charger (check)

• ELECTRICAL

- Wiring and connections (check)
- Circuit breakers/fuses (check)

• GENERATOR

- Debris/foreign objects/loose or broken fittings (check)
- Vibration/leakage/noise/temperature/deterioration (check)

• MONTHLY TEST

- Minimum of 4 continuous hours
- Minimum of 30% load

• ANNUAL TEST

- Run at 25% load for 30 minutes, followed by;
- Run at 50% load for 30 minutes, followed by;
- Run at 75% load for 60 minutes, for 2 hour continuous test

• TRIENNIAL TEST

- Minimum 30 minute continuous run time
- Minimum 30% load
- Required to run 12 times per year
- Intervals to be from 20-40 days
- Required to run 12 times per year
- Must run at minimum required exhaust temperature per manufacturer

ATS TESTING

• MONTHLY INSPECTION

- Test all transfer switches
- Intervals to be from 20-40 days
- Infrared testing of ATS (recommended)

• ANNUAL INSPECTION

- Free from accumulated dust/dirt (check)
- Deterioration of transfer switch

