

# Generator Load Bank Testing

A comprehensive preventive maintenance program is critical to the reliability of a standby generator, and load bank testing is an essential part of good maintenance practices. Performing yearly load bank testing helps to extend the generator's engine life, and helps to ensure reliable operation during a utility power failure.

## **What is load bank testing?**

Load bank testing allows a standby generator to be tested and exercised to verify its overall reliability, and its ability to run at its full rated KW output. Typically, a generator is running at a level far less than the units rated output capability. Load bank checks the engines ability to perform and provide the required horsepower when called upon in an emergency. When a load bank is used, the artificial load it provides brings the engine up to an acceptable operating temperatures.



## **What is no-load testing?**

Most data center customers exercise their standby generators weekly un-loaded, but very rarely test them with building loads, relying on the occasional utility loss to do the testing. For diesel engine driven generator sets this can cause 'wet stacking'. Wet stacking is when unburned fuel accumulates in the engine exhaust. This is caused by under loading a generator. When exercising a generator, or running it for short duration outages while under loaded, the engine may not reach its optimum operating temperature. When this is allowed to continue for long periods of time the unburned fuel accumulates, and can become harmful to the engines efficiency and life span.

## **The benefits of load bank testing**

Load bank testing allows the engine to reach this full operating temperature and 'burns out' this accumulation of un-burnt fuel. The result is a unit that runs cleaner and more efficiently. It also offers peace of mind that your standby generator is operating as it was designed too. Any generator set, whether the prime mover is diesel or gaseous fuel driven, can benefit from having it load bank tested.



## **EEC's load banking service**

During the load bank test Electronic Environments monitors critical engine parameters such as; oil pressure, engine temperature, fuel pressure, etc. We record these readings to show that once the unit reaches full rated load it runs at normal operating temperatures and pressures. With this service Electronic Environments provides a full report of

the readings including generator output readings such as; voltages, amperages, KW amounts, etc.

Electronic Environments offers load bank testing as a separate service, or we can structure it into a service contract to make it part of the scheduled, and budgeted, yearly maintenance on your standby power system. Load bank testing is in no way intrusive, and during the test there is no interruption to your facilities loads. Most manufacturers agree; a generator set that is frequently run lightly loaded, or never loaded at all, can benefit from being load banked on a yearly basis.

To learn more about our load bank test service, fill out our [contact form at www.eecnet.com](http://www.eecnet.com), email us at: [sales@eecnet.com](mailto:sales@eecnet.com) or call 800-342-5332.