



Vol II Issue 4 – Protecting Critical Operations
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Keeping the Lights On: Backup / Emergency Power

Power loss often results in lost revenue and inventory. Your top priority is protecting your critical operations. Plants need to maintain communications with IT and programmable logic controllers. An infrastructure should be in place to support a reliable, failure-free system and plant personnel need training on product operations and procedures to follow when the lights go out. The goal is to restore power to the operation as quickly as possible to avoid damaging downtime. Woodward's easYgen-3000 genset control and protection system has flexibility and features needed for a wide range of power generation applications, including Emergency Stand-by, AMF (Automatic Mains Failure), and utility paralleling with peak shaving and import/export control. Common applications also include Cogeneration, Marine ship/shore power, Island prime power. The easYgen-3000 Series is able to control up to 32 gensets connected in a network with automatic sequencing.

Emissions Control Update

Are you
ready for
RICE
NESHAP?



Owners or operators of stationary, non-emergency generators, pumps, compressors or engines may need to comply with US EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) covering stationary reciprocating internal combustion engines (RICE).

Don't wait. GCS designs products to help engine owners and operators meet compliance requirements. The deadline for compliance of non-emergency diesel (CI) engines was May 13, 2013; October 13, 2013 for non-emergency gas (SI) engines.

The federal Clean Air Act has severe penalties for non-compliance, including costly fines of up to \$37,500 per day per violation and criminal penalties.

The EPA will allow backup stationary engines that generate electricity to run without emissions controls for 100 hours per year during electricity peak-use periods and emergencies, but the engines must use ultra-low sulfur diesel fuel beginning in 2015, according to the final rule.

Emergency Engines in Peak Shaving Programs

If you participate in a Peak Shaving Program your engines may be required to meet the improved air quality levels, requiring that you retrofit your engine with a catalytic emissions control. The regulations apply to compression ignited, non-emergency engines, 100 - 500 hp.

According to §63.6640(f) (3) in the NESHAP, facilities may operate their emergency engines for the purpose of maintenance checks and readiness testing for 100 hours per year. An owner of an emergency engine could hook their engine up to the grid as part of that checking and testing. ***The owner cannot hook up to the grid during testing and provide electricity to the grid under a financial incentive and still be considered an emergency engine as stated in the definition of Emergency Stationary RICE in the rule.***

§ 63.6640, F, (2)

“(iii) You may operate your emergency stationary RICE for an additional 50 hours per year in non-emergency situations. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.”

The rule is clear: an engine categorized for emergency use only is not permitted to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity.

Maintaining Emissions Compliance: Recommended Catalyst Maintenance

Record pressure (DP) and temperature (DT) after 8-20 hours of operation

Every 3 months thereafter (2000 hours): DP and/or DT monitoring;

Every 1 year (8000 hours): Inspect the catalyst substrate

Every 2 years (16000 hours) or as necessary: Chemical cleaning of catalyst substrate

CATALYST WASHING

GCS offers chemical washing and repair for all makes and models of catalysts and substrates as well as catalyst replacement.

Washing is a chemical process for removing accumulated ash from the surface of the catalyst to extend service life. It is important that correct equipment is employed or the catalyst may be damaged. Catalyst material is sensitive to metallic compounds and inorganic compounds present in regular tap water and soap. Washing of the catalyst element in base and acid solutions is recommended after two to three years of operation in order to restore activity to an old catalyst.

REPLACEMENT CATALYSTS

GCS can match specific housings or catalysts with those of any other manufacturer, for easy replacement of your existing emissions control equipment with their quality engineered technology.

MSHS Group Update

GCS SEATTLE OFFICE

GCS is proud to announce that we are the Woodward Authorized sales and service center for Washington, Oregon, Northern Idaho, Alaska and Hawaii. GCS has purchased the Woodward governor operation and all related assets from Case Marine, Inc. and will continue operating from the Seattle location, providing the quality service with the same experienced staff.

The Pacific Northwest office joins the GCS network of Woodward Service and Repair facilities with locations in the South East, Gulf Coast, and Mid-Atlantic. The GCS Pacific Northwest service and repair facility offers reliable resource for governor service and repair, supported by GCS's extensive Woodward inventory. GCS Seattle joins all GCS locations in the Woodward Network of Recognized Engine and Turbine Retrofitters.

GCS network of Woodward Authorized service facilities is committed to 24/7 customer service and specializes in repair and service for military, marine, utility/power generation, pulp and paper, chemical processing and industrial markets.

MSHS NEW ORLEANS TURBOCHARGER OFFICE

MSHS announces the launch of its fully authorized turbocharger maintenance and service center in New Orleans, LA. The MSHS facility offers complete turn-key services for all turbochargers operating in the Gulf Coast region. Fully authorized by Napier Turbochargers, a leader in turbocharger design and manufacturing, MSHS supports all marine applications and industries.

MSHS Gulf is equipped with the latest in balancing technology and supported by an extensive inventory of turbochargers and spare parts. Factory-trained technicians provide service either at the facility or on location.

Upcoming Trade Shows

Workboat Show 2013, Booth 2942
October 9-11, 2013, New Orleans, LA
Register for a VIP pass, compliments of GCS

LAGCOE - Louisiana Gulf Coast Oil Exposition - 2013 Booth EH174
October 22-24, 2013, Lafayette LA

NWPPA/APA Alaska Electric Utility Conference 2013 Booth 204
October 28-31, 2013, Anchorage, AK

Fort Lauderdale International Boat Show 2013 Booth 1211
October 31 - Nov. 4, 2013, Ft. Lauderdale FL

PowerGen 2013 Booth 2533
November 12 - 14, 2013, Orlando FL