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Fluid Dynamic Power Cells

## FLUID DYNAMIC POWER CELLS AID DIESEL GENERATOR FUEL EFFICIENCY

A THREE-MONTH TRIAL of Eneflow fluid dynamic power cells at the Flinders Island Power Station in Australia made a believer out of Dave Street, power station supervisor. "I was quite skeptical, however the facts and figures speak for themselves," Street said. The power cells use magnetic fluid treatment technology to increase combustion efficiency.

Flinders has a 1,550 kW capacity from two Caterpillar 3512 diesel generators and two Rolls Royce C6200G diesel generators. Fuel consumption is approximately 270,000 gallons annually. The Eneflow system was installed on one Caterpillar diesel yielding an average savings of 783 gallons per month, equating to 9,400 gallons annual fuel savings.

Enecon Corp. is working to develop and advance magnetohydrodynamics, the science involving the principles of fluid motion affected by a magnetic field. The company's power cells can also control mineral scale build-up and scale-induced corrosion in fluid flow systems. "Eneflow power cells homogenize and polarize gasoline, diesel fuel and heating oil. The fuel, therefore, burns cleaner and more efficiently. Substantial improvements in fuel economy have been shown test after test," said Andrew Janczak, Enecon president.

At Flinders, Eneflow equipment was fitted to each injector line running from the fuel injection pump to the injectors of the Caterpillar engine, which is coupled to a Stamford C534C generator rated at 250 kW. Prior to the installation the unit had completed 7,000 hours with an average generation rate of 16.5 kWh/gal. During the three-month trial period, the equipment generated an average of 20.4 kWh/gal.

"The technology offers significant benefits over chemical softening methods. Maintenance costs are reduced," Janczak said. "No special removal equipment or filters are required." The power cells are non-invasive, installing around existing pipes with no need to cut into the system. No external energy source is required.



Fluid dynamic power cells installed for a trial run at Flinders Island Power Station.