

CASE STUDY

FOR IMMEDIATE RELEASE



February 17, 2011

Contact: Jennifer Riley
MTU Detroit Diesel
Phone: +1 313 592 8103
E-mail: jennifer.riley@mtu-online.com

Agency contact: Robert E. Sheldon, APR
Creative Communications Consultants, Inc.
Phone: 210-828-1880
E-mail: rsheldon@cccinc.com

MTU Onsite Energy generator helps keep cows cool and milk flowing at West River Dairy

Unit also allows load shedding by local utility, cutting dairy's electric bill.

MORRIS, Minnesota—West River Dairy, one of several dairy farms managed by [Riverview LLP](#), houses 6,400 cows in the countryside near the rural community of Morris in western Minnesota. Built in 2004, West River originally relied on a “naturally vented” barn system, in which curtains along the walls could be rolled up to let air through the barn. With fan technology becoming more common in agricultural settings, however, Riverview recently installed a cross-ventilation fan system at its West River facility to pull air through the barns and milking parlor as needed. Because milking is a “mission critical” operation for a dairy farm, Riverview installed a new generator from Katolight by [MTU Onsite Energy](#) to ensure that the fans—and the milking operations they support—would operate without interruption even during a power outage.

2/5



When West River was built, a pair of Katolight 600 kW generators provided backup power for the lighting and other equipment in the barns. Though emergency backup power wasn't required by code, "when you're milking at this scale, it's a business requirement that crucial equipment is never without power," said Jim Nieland, project manager for Riverview. Cows are milked twice a day, every day, yielding seven to eight gallons of milk at each milking. Not milking affects production levels as well as the health and comfort of the animals.

According to Nieland, Riverview's goal in installing the cross-ventilation system at West River was to lower barn temperatures during the summer to keep the cows more comfortable and thereby minimize reductions in milk output. The existing generators couldn't handle the extra load from the 240 cooling fans, so Riverview installed a new 750 kW MTU Onsite Energy generator to handle the 480 hp fan load. (MTU Onsite Energy purchased Katolight in 2007 and continues to build on the heritage of the Katolight brand name in the agriculture market. Katolight's roots can be traced back to 1928, with emergency power systems first sold to dairymen in the 1950s. Agriculture remains an important market for MTU Onsite Energy today.)

Making the choice

Riverview's experience with Katolight products goes back about a decade, and the dairy uses at least 15 Katolight generators at its locations. In addition to this long history of service with Katolight, Riverview chose MTU Onsite Energy generators to handle the new fan load for their cost, performance, reliability and delivery. "The generators have always been competitively priced and trouble-free; it's nice if you don't have to think about them a lot," Nieland said.

The 750 kW MTU Onsite Energy generator set features the MTU Series 2000 diesel engine that excels in fuel efficiency and its ability to respond quickly to changes in load. With a greater cylinder displacement per brake horsepower than other comparable generator drive engines, the MTU Series 2000 engine is better able to maintain rated voltage and frequency when large fan motor loads are cycling on and off.

-more-

3/5



Delivery and installation were important as well. The delivery date “was critical” because Riverview wanted the West River fans to be running before the weather got too warm. Fortunately for West River and its cows, the generator arrived on time. When the generator set arrived, “it’s ready to run very quickly because nearly everything is taken care of at the factory,” Nieland said, including the integration of a fuel tank. “You just take it off the truck, set it in place, and it’s ready for wiring.”

Cold-weather enclosure

Because of Minnesota’s harsh winter climate, the West River generator is housed in an all-weather enclosure with 1.5 inches of insulation that reduces heat loss. Although the generator set primarily supports summertime fan use, even in the winter some ventilation is needed in the barn. Additional smaller loads also need to be operational throughout the year in the event of a power outage. Block heaters keep the engine warm even when it’s very cold outside. “If the temperature is 15 below zero and there’s a power outage, the generator is still warm enough to start and accept the load right away,” Nieland said. In addition, the enclosure’s ventilation system includes intake and exhaust louvers that stay shut unless the unit is running, keeping out wind and snow.

Generator makes up for load shedding

Nieland estimates that the new West River generator will run about 100 hours a year, primarily for load shedding with the local utility, [Agralite Electrical Cooperative](#) in Benson, Minnesota. By allowing Agralite to shed West River’s load during periods of peak power demand such as hot summer afternoons, “we get a much more attractive electrical rate,” Nieland said.

During load shedding, a radio signal from the utility starts the generator, which accepts the fan load once it has reached the proper voltage and frequency. With a 1,260-gallon fuel tank, the generator can meet any demands resulting from load shedding and/or power outages during a 24-hour period without refueling.

-more-

4/5



Whether the cause is load shedding or a summer thunderstorm, a loss of primary power at West River will have no impact on its thousands of cows, as they stay cool—and productive—with the new MTU Onsite Energy generator on the job.



West River Dairy, which milks 6,400 cows, relies on emergency standby power from MTU Onsite Energy to support a new cross-ventilation fan system for this “mission critical” operation.



At West River Dairy, the 750 kW MTU Onsite Energy generator set features the MTU Series 2000 diesel engine in an all-weather enclosure, ensuring that, despite harsh winters and hot summers, ventilation fans will operate as needed to keep cows comfortable and milk production optimal.

(MTU-8177)

– End –

MTU Onsite Energy Corporation

MTU Onsite Energy Corp. (formerly Katolight Corporation) is a leading producer of diesel-powered generator sets from 30 to 3,250 kW and natural gas-powered generator sets from 20 to 400 kW for standby, prime power and cogeneration applications. The company also provides automatic transfer switches, paralleling switchgear, controls and accessories for complete power system solutions. Based in Mankato, Minnesota, MTU Onsite Energy Corp. combines the expertise of Katolight and MTU Detroit Diesel Power Generation under one brand to meet the ever-increasing distributed power needs of customers in North America and around the world. MTU Onsite Energy Corp. is part of the Tognum Group's business unit, Onsite Energy and Components. For more information, visit www.mtu-online.com

-more-

5/5

**Tognum**

With its two business units, Engines and Onsite Energy & Components, the Tognum Group is one of the world's leading suppliers of engines and propulsion systems for off-highway applications and of distributed energy systems. These products are based on diesel engines with up to 9,100 kilowatts (kW) power output, gas engines up to 2,150 kW and gas turbines up to 45,000 kW.

The product portfolio of the Engines business unit comprises MTU engines and propulsion systems for ships, for heavy land, rail and defense vehicles and for the oil and gas industry. The portfolio of the Onsite Energy & Components business unit includes distributed energy systems of the brand MTU Onsite Energy and fuel-injection systems from L'Orange. The energy systems comprise diesel engines for emergency standby power, prime power and continuous power, as well as cogeneration power plants based on gas engines and gas turbines that generate both power and heat.

In 2009, Tognum generated revenue of €2.5 billion and employs more than 8,700 people. Tognum has a global manufacturing, distribution and service structure with 27 fully consolidated companies, more than 140 sales partners and over 500 authorized dealerships at approximately 1,200 locations. The shares of Tognum AG (ISIN: DE000A0N4P43) have been stock-exchange listed since 2007 and are included in the MDAX.

###