

“In cooperation with the MWM Service, the operating stability of the CHPs improved significantly”



The Biogas Park Altmark was a flagship energy project in the predominantly agricultural region of Saxony-Anhalt when the ten plants were commissioned in the years 2006 and 2007. The plants were initially built and operated by Dalkia Energie Service GmbH. In mid-2011, Danpower took over Dalkia Energie Service GmbH and thus also the biogas plants in the Altmark region. Up to the acquisition in 2011, service procedures were performed on the cogeneration systems primarily by staff on site. In order to ensure fault-free long-term operation of the ten plants, Danpower Energie Service GmbH, headquartered in Potsdam, quickly implemented a service and maintenance contract with MWM.

Knut Bölke, Biogas Project Manager at Danpower and Site Manager at the Biogas Park Altmark, recalls: “As the E70 general overhaul was due for the ten CHP plants in the year 2014, we initiated contact with the MWM Service Center in Berlin in mid-2013, and in December the contracts were a done deal. A great advantage of this cooperation for us is the ability to plan. With the MWM Service Center Berlin, we developed a schedule for the replacement of the ten engines, which has been in effect since May 2014. As a result, we can minimize the downtimes of the individual plants and also schedule in additional maintenance procedures during that time.”

“Since concluding a service and maintenance contract with MWM for our ten biogas plants, the availability has been excellent, and the machines have been running more fault-free.”



Knut Bölke, Biogas Project Manager

“As we have been satisfied thus far with the performance of MWM, after a basic overall of the engines by MWM, we will continue the full-service maintenance contracts with a running time of 63,999 operating hours per engine from the initial hour of operation. There is a 24-hour hotline in case of issues, and minor faults or malfunctions can be quickly pinpointed and corrected thanks to remote monitoring of the gensets. In the Altmark region, we operate a centralized office for all ten plants with five operations technicians,” explains Bölke, Head of Operations. “The maintenance procedures performed by the MWM technicians on site require only minimum support from Danpower employees. We were especially pleased to see that the genset replacement took only three to four days, instead of the scheduled five days. That went really quickly.”

“Handling and predictability of maintenance procedures on the plants have improved, which for us translates into reduced risk in running operations.”



Biogas Park Altmark, Danpower Energy Service GmbH, Potsdam, Germany

Contact person	Knut Bölke
Cities	2x Garlipp, 2x Belkau, Neukirchen, Berkau, Schäplitz, Spänigen, Meßdorf, Beelitz
Country	Germany
Substrate	Corn silage, grass silage, WCS
Acreage	approx. 200 ha/plant
Gas production	10 x 2 Mio. m ³ /a
Power production	10 x 4,000 MWh/a
Heat output	10 x 2,400 MWh/a



Technical specifications for CHP plants

Commissioning	2006 - 2007
Engine type	10 x MWM TCG 2016 V12
Generator	Marelli MJB 400 LA4
Electrical output	536 kW
Electrical efficiency	39.5 %
Thermal efficiency	38.6 %
Overall efficiency	78.2 %
Power-to-heat ratio	1.025



Details

Per year and plant, some 10,000 t of energy crops are used in the Biogas Park Altmark. These are supplied by farms from the region. The use of renewable energy sources reduces carbon dioxide emissions, as the use of biogas only releases as much CO₂ as the plants absorbed during their growth.

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