

Abu Dhabi power plants benefit from using Coriolis meters to measure backup fuel oil

RESULTS

- Reduced discrepancy in reconciliation generated more confidence in the measurement process
- Newly installed Coriolis meters reduce OPEX costs



APPLICATION

Abu Dhabi power plants (each company is 60% owned by the government and 40% by a private consortium) receive free natural gas from the Abu Dhabi Water & Electricity Company (ADWEC). ADWEC monitors its usage through a SCADA system and USM meters. When natural gas is not available, fuel oil is used. Fuel oil is bought by plants and kept ready on the premises. Its usage is also monitored and reconciliation is done.

CHALLENGE

The usage of old turbine and PD flow meters was leading to higher OPEX costs due to meter maintenance as well as incorrect standard volume calculations in the flow computer. This caused a reconciliation discrepancy in fuel oil usage (unloading to storing to turbine feed) between the power generation plants and the power buying company, ADWEC.

SOLUTION

The company decided to replace their old flow technology with Micro Motion® Coriolis mass flowmeters. This provided better repeatability and less OPEX year-to-year due to no moving parts, more dependable volume measurement compared to pressure and temperature compensated volume flow devices. In addition, Micro Motion Smart Meter Verification allowed the company to continuously monitor meter health and performance. Smart Meter Verification is especially important in Abu Dhabi because there is a mandatory two year meter verification cycle in power plants. Coriolis meters satisfy the application demand of precise measurement, direct standard volume output to the settlement system (without requiring a flow computer) and operating volume output for government control.

Coriolis meters improve internal asset reconciliation and reduce operating costs.

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Micro Motion Coriolis meter measuring fuel oil.



For more information:
www.MicroMotion.com/power
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POWER

This application requires meter sizes (max CMF400) which can be recalibrated in the Abu Dhabi Flow Lab. Plant benefits include full lifecycle support, maintenance, training and upgrades.

