Norway Oil Fields - Offshore Oil

CAPACITY: 56.2 MW

A major oil and gas operator in Norway owns and operates five turbines located off the coast of Norway in the North Sea. Turbines JA-001 and JA-002 operate at 23 MW and dire on fuel gas, and turbines RI-101, RI-102, and RI-103 operate at 5300 kW and also fire on fuel gas.

The turbines are operated in accordance with the framework permit regulations specified for the individual sites by the Norwegian Environmental agencies. The units are required to monitor NOx emissions and report on annual basis for environmental purposes and on a quarterly basis for taxation purposes.

***Not actual site. Source: Offshore Energy Today**

The exhaust gas is discharged to the atmosphere through a stack. Emissions are monitored using a statistical hybrid predictive emissions monitoring system (PEMS). The PEMS installed is a SmartCEMS™ analyzer provided by CMC Solutions. Model training data was collected by a certified testing company in 2012 and 2013. A data input template and fuel composition template was provided by the unit operator. The templates will be used to manually input process data to predict emission rates and generate reports.

DAS System: CMC Solutions
History of Project Development:
12/01/2014
CMC Received certified testing data from the turbines. Using this data and emission factors CMC developed a model for the 5 turbines.
03/18/2015
Model was deployed and training was conducted.
03/25/2015
After installation, the client requested that the operating envelope be expanded.
03/30/2015

The model was analyzed against emission test data. All models performed well. A QA manual was prepared and given to the client.

12/07/2015

Client has accepted the PEMS system.

PRODUCTS: