



CESS REF: DEMM0032

## **44MW, 60Hz Deutz Gas Oil Engine Power Plant** **+ Auxiliaries**

### 8 x 5.5MW Deutz Gas Oil Engine Package

Engine Manufacturer	:	Deutz
Engine Model	:	BV 16M 540
Rated Capacity	:	5,446kW
Speed	:	514rpm
Fuel	:	Gas Oil (MDO/HFO tbc)
Generator Manufacturer	:	Siemens
Frequency	:	60Hz
Capacity	:	6,500kVA
Power Factor	:	0.8
Voltage	:	6,600V
Current	:	596 A
Year of Commission	:	1979



### Operational History

No	Last Major Overhaul (hrs)	Current Total hrs	Since Overhaul (hrs)
1	79417	89534	10117
2	83269	90548	7279
3	79165	90335	11170
4	86515	90868	4353
5	86553	88149	1596
6	81069	91483	10414
7	81318	87794	6476
8	84700	87165	2465



## Starting

Deutz genset to enable black start together with two electric and one diesel start air compressors, each genset has individual start air tank.

## Cooling

Cooling is by way of heat exchanger (seawater/coolant water), the seawater pumps and heat exchangers will be retained by owner. Each genset has its own cooling circulation pump taking from a common manifold.

## Lube Oil

Each genset has lube oil tank and purification system, the oil centrifuges are paired up on the same skid, lube oil cooling is achieved by individual vertical plate heat exchangers.

## Fuel

The plant has operated on diesel oil throughout its life, fuel filtration on each genset is by way of its own gauze filter tower, a fuel transfer pump then fills the individual daily service tanks which then feed the engine injection system by gravity. Documents indicate engines design will allow MDO or HFO fuel options (assuming appropriate pre-treatment).

## Turbochargers

Turbochargers are of type ABB VTR 354-11 and are a 1995 upgrade from the original BBC turbochargers, since this upgrade the turbochargers have operated for between 10,000 and 37,000 hours.

## Control Room

Integrated control system is by Siemens and of original supply, some of the distribution cabinets will be retained and therefore will not be part of the scope. Individual local controls are also by Siemens.