220MW Gas Turbine Generator Combined Cycle Power Plant for Sale
50Hz. Natural Gas/Naphtha Fuel

The plant consists of a 140MW Siemens V94.2 GTG, a 200MVA Ansaldo generator, a and 80MW Ansaldo STG with ABB Controls, Heat Recovery Steam Generator, Electrical Generators and Foxboro DCS Control System for HRSG & BOP. The plant is for sale to be moved.

The plant was became operational 2002 and continuously operated on Natural Gas as well as Mix Fuel Operation (Gas + Naphtha) till January' 2015. Currently the plant is in the preservation mode.

The total land required for the Project including power block and Balance of Plant facilities is ~15 acres.

Total (sweet/ processed) water requirement for the Project is ~ 6000 Cu.M/day with closed cooling system.

Base load gas requirement for the Project is about 1.05 million standard cubic meter per day (mmscmd).

All the equipment is under preservation mode and so is readily available upon dismantling and can be installed in the shortest possible time.

The plant is capable of dual fuel operation.

In lieu of the excellent operation and maintenance procedures, which can be verified from the maintenance records, the plant will have better Heat rate and higher efficiency than such machinery available worldwide at a lower cost, thus efficiently utilizing the gas resources.

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| **Equipment** | **Specification** | **Technology** | **Manufacturer** | **Type** |
| Gas Turbine Unit | 140 MW (Base load as per Site)Equivalent Operating Hours (EOH) since commissioning: **113613.9** | Siemens V94.2 | Ansaldo Italy | Dual Fuel Firing- Liquid & Gas(Gas/Naphtha/HSD) |
| Gas Turbine Generator | 200 MVA, 15KV , 50Hz | Ansaldo | Ansaldo Italy |  WY21Z-097LLT (Air cooled, Static Excitation) |
| GTG Transformer | 210 MVA (235/15KV) |  BHEL |  BHEL, India | Oil filled, OFAF |
| Heat Recovery Steam Generator (HRSG) | **HP** steam 226 TPH at 83.4 kg/cm2. 528 deg C **LP** steam 56 TPH at 5.24 kg/cm2. 205 deg C | Ansaldo | Ansaldo, Italy | Horizontal, Natural circulation & all modules fully drainable |
| Stack | Main stack: 60 meterBypass stack: 40 meter |   | Fouress Engg. (India)Ltd | Installed with Bypass Stack Dampers  |
| Steam Turbine | Rated MW: 80 Steam pressure (HP/LP): 83.78 kg/cm2 / 5.24 kg/cm2 Steam temperature (HP/LP): 526 deg c/ 198.9 deg c | Ansaldo | Ansaldo, Italy | HDS16010NDA31.Single Cylinder, Dual Pressure, Condensing |
| Steam Turbine Generator |  105.5 MVA, 11.5 KV , 50 Hz | Ansaldo | Ansaldo, Italy | WY18Z-073LLT(Air cooled, Static Excitation) |
| STG Transformer | 110 MVA (235/11.5KV) |  BHEL | BHEL, India  | Oil Filled  |
| **Balance of Plant** |  |  |  |  |
| Black start DG | 500 KVA ~ 2 Nos  |  | Cummins India Ltd |  ( Engine model VTA 28-G. Generator : Stamford, model HC54402) |
| Fuel Gas System | Max operating flow 1.46 MMSCMD |  | Multitex | With Redundant Filters & Pressure Regulators as well as Orifice Flow meter, Pressure Reduction 27/19 barg |
| Cooling Tower | 20000m3/h flow , 7 nos twin Cells Induced Draft Counter flow |  | Paharpur Cooling Tower, Calcutta  | Concrete Structure Paharur model no 83462-4.0-108 |
| Circulating Cooling Water Pumps | 3 Nos, Vertical Mixed Flow, 8872 M3/H  |  | Mather and Platt (I) Limited |  Model No 36 VMF4 |
| Aux. Cooling Water Pumps | 3 Nos, Vertical Mixed Flow, 890 M3/H |  | Mather and Platt (I) Limited |  Model No 12 VMF |
| DM Plant | 2 X 60 m3/h |  | Ion Exchange |   |
| Plant Fire Fighting System | 1) Hydrant Pumps (2 Nos Motor driven and 1 Nos Diesel Engine driven)2) Spray System(1 Nos Motor driven and 1 Nos Diesel Engine driven)3) Deluge System4) Plant Fire Alarm System |  | 1) Mather &Platt (I) Ltd.2) Notifier by Honeywell  | 1) Split casing Horizontal Pumps2) Auto/remote & Manual Operation.3) Addressable Type |
| **Control Systems** |  |  |  |  |
| GT & ST control system  | ABB MESA  |  |  ABB  |  Symphony Enterprise Management and Control System, INFI-NET Uni-direction, HighSped Data Network, 10to 2 MHz, CommunicationProtocol INIIT 12 |
| HRSG & BOP Control system | Control Processor : CP60 | Invensys | Invensys Foxboro on XP Platform | Model Fox View V99.201 |