

Glossary of Technical terms

| Sl. No. | Terminology | Description |
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| 1 | Annual overhauling | In a year generally for 21/25 days the plants are taken under shut down for attending defects such as, replacement of worn out spares, checking of bearings clearance and alignment of turbine, generator. |
| 2 | Boiler feed pump | It is a high pressure pump containing multistage impellers to feed the water in the boiler drum through various pressure parts of boiler. |
| 3 | Calorific value | It is a value of heat (Kcal./Kg) to be delivered by coal during the combustion in the boiler to generate one unit of Electricity. |
| 4 | Capital overhauling (COH) | Once in four years COH is undertaken generally for 35/40 days to attend major defects in the critical equipments viz., turbine, generator, feed pumps <i>etc.</i> |
| 5 | Coal mills | It is equipments in which the coal is pulverized up to fine particle to feed in the boiler for continuous firing. |
| 6 | Combined cycle power plant/ project | This plant consists of configuration of a gas turbine generator and a steam turbine generator. In this plant, the gas initially utilised in the gas turbine is further utilized in the water tube boiler for generation of electricity by Steam turbine. |
| 7 | Condenser tubes | The steam utilised in the turbine is collected and cooled by cooling water circulating in the condenser tubes. |
| 8 | Cooling water pump | These pumps are installed to supply the water to the condenser received from cooling tower. |
| 9 | Dual flue gas conditioning system | In DFGC system SO ₃ (Sulphur) and NH ₃ (Ammonia) are injected before ESP inlet in the flue gas to reduce resistivity of fly ash and increase the collection efficiency of ESPs. |
| 10 | Economizer tubes/ assemblies | This pressure part is a bunch of small diameter of carbon steel tubes in which the water is circulated to recover the heat energy from the flue gas for rising the temperature of water for making the steam. |
| 11 | Electrostatic precipitator (ESP) | This equipment is located near the chimney. The flue gas released from boiler enters in the ESP in which ash is collected through magnetic field created by two types of electrodes (collecting electrodes & emitting electrodes) installed in the ESP. |
| 12 | Forced draft fans | These fans are installed for supply of air through suction from atmosphere and the discharge is passed through air heaters to raise the temperature to be supplied to burners located in boilers. |
| 13 | Generator rotor | A generator rotor converts the mechanical energy into electrical energy. |

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| 14 | High pressure heaters | High Pressure (HP) feed water heaters are used to recover heat from the steam which is extracted from the turbine. The heat that is transferred from the steam to the feed water increases the temperature of the feed water which is then directly fed into the boilers. |
| 15 | High pressure turbine rotor | It is a rotor of high pressure stage of turbine in which steam at rated pressure is injected. |
| 16 | Induced draft fan | These fans suck the flue gas having temperature of 900°c from the furnace through the second pass and the ESP and discharge the gases into atmosphere through chimney. |
| 17 | Low sulphur heavy stock oil (LSHS) | This is a by-product fuel, produced during refining the raw oil extracted from the earth crust after extracting Fuel oil cost-wise it may be cheaper than Fuel Oil. |
| 18 | Low temperature super heater (LTSH) | This LTSH part is equipped with number of tubes in which the steam of low temperature is circulated for rising further temperature of steam from the heat of flue gas passing around the LTSH area. Thereby, heat energy from flue gas is recovered and out let temperature of flue gas is maintained. |
| 19 | Plant availability factor (PAF) | This factor indicates the hours during which unit is available for generation during a certain period. |
| 20 | Plant load factor (PLF) | It is the percentage of actual generation to rated generation capacity of plant. |
| 21 | Platen super heater | This is a pressure part located in the first pass of boiler at 45 meter elevation below Boiler drum. The low temperature steam is circulated in it. |
| 22 | Rated capacity | The designed generation capacity of the power plant. |
| 23 | Raw coal stacker reclaimer | It is a moving plant used in coal yard for stacking of crushed coal and reclaiming it to feed in furnace. |
| 24 | RLA study | RLA study full name is Residual life assessment study. It is conducted normally after the completion of 10/12 years of operational life of the plant to assess the balance life of each equipments/ plant. |
| 25 | Turbine rotor | A turbine rotor in a thermal power plant converts heat energy in the steam coming from boilers into mechanical energy |