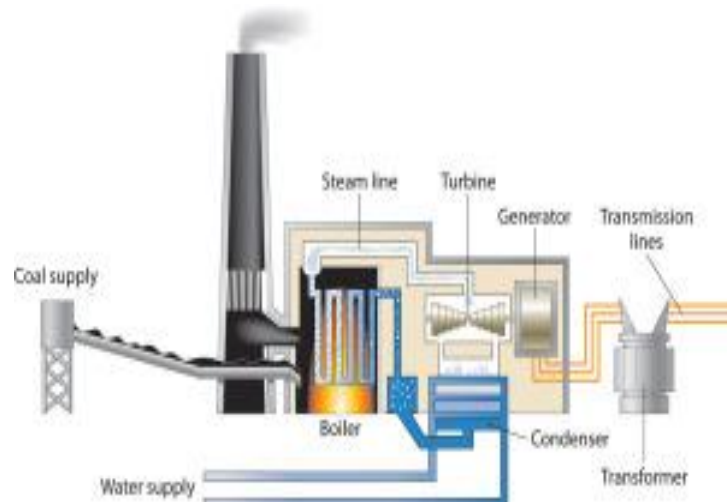


COAL POWER

December 4, 2013 · by Faizan Khalid · in Beneficial Knowledge. ·

Coal has the great potential to be employed as a fuel in the operation of power plant. Different forms of coal are found in reservoirs of the earth in different parts of the earth. This has been used for years as a fuel in the locomotives or the train built by the British here in Pakistan. Due to an increase in the price level of petrol, diesel, and high-octane petrol, more focus is being placed on this type of power. Transportation and freight carriages are one of the challenges faced in its transportation. Some technologists think and champion the idea of converting coal to coal gas before using it in the power plant. Steam is generated by burning the coal in the boiler of the power plant. This steam is then used to rotate a coil in a permanent magnetic field, which generates electricity in accordance with Faraday's Law of Electromagnetic Induction. Coal is cheap in some countries where its deposits are in abundance. Secondly, there are not advanced control systems and modernized machinery and computer systems are used for it to run successfully. A less technically competent person can run a coal power plant as opposed to a nuclear power plant. Coal fuel is cheap and thus can be used for generating electricity at a lower price per kilowatt-hour (KWH).



Some of the disadvantages are pollution, waste materials disposal problems, and transportation and handling costs which can be real if it is to be transported at a large distance. So, it is economical to set it near the site where coal is abundant.

Environmental degradation might be caused if the exhaust chimney of the boiler is not sufficiently high in the air.

But relatively low construction cost, and low operating fixed and variable costs are the features which make it quite suitable for generating electricity in ample amounts.

References;

1. Mehta, A.K., Mehta, V.K., "Principles of Power Systems" chapter 1.

Source: <http://faizankhalid.wordpress.com/2013/12/04/coal-power/>