Industrial visit 2016-17III report

Balaji Energies Pvt Ltd., Somasila Dam,SPSR Nellore (DT), A.Pon 03-01-2017 Balaji energy to set up 10 MW Somasila hydro electric Project in somasila in Atmakur Talluk In nellore District of Andhra pradesh.The project Involves setting up of two units of vertical Kaplan adjustable blade type turbines of capacity5MW each to harness the hydro potential available at somasila reservoir.The project had been commissioned in 2007

Parts of a Hydroelectric Plant Most conventional hydroelectric plants include four major components (see graphic below):

1. Dam.

Raises the water level of the river to create falling water. Also controls the flow of water. The reservoir that is formed is, in effect, stored energy.

2. Turbine.

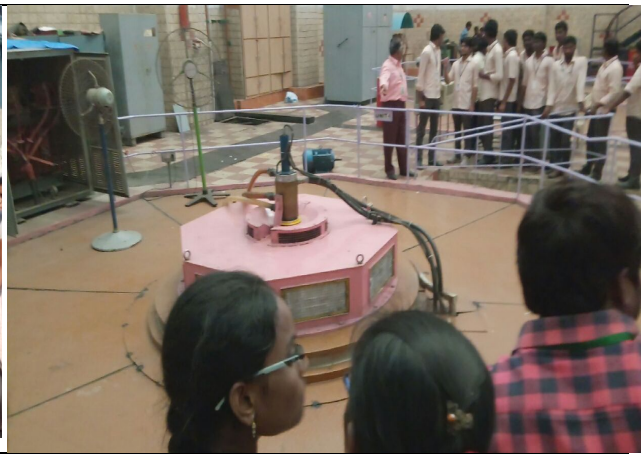
The force of falling water pushing against the turbine's blades causes the turbine to spin. A water turbine is much like a windmill, except the energy is provided by falling water instead of wind. The turbine converts the kinetic energy of falling water into mechanical energy.

3. Generator.

Connected to the turbine by shafts and possibly gears so when the turbine spins it causes the generator to spin also. Converts the mechanical energy from the turbine into electric energy. Generators in hydropower plants work just like the generators in other types of power plants.

4. Transmission lines.

Conduct electricity from the hydropower plant to homes and business



CONCLUSION:

The Industrial Visit to the Balaji Energies Pvt Ltd., Somasila Dam was highly successful. We received insight of the whole plant right from the raw material (water) procurement, processing, generation & transmission of electricity. The whole process was explained in-detail by their representative with detailed description about each equipment with their specifications. A doubt solving session with the Control Room Incharge cleared all our queries. This kind of industrial exposure helped us to absorb the theoretical aspects of Power Plant and Power Electronics Engineering more efficiently.