## **Industrial Visit Report**

### SOLAR POWER PLANT,KARNATAKA POWER CORPORATION LTD (KPCL) AND CAUVERY HYDRO ENERGY LTD

#### (Shivanasamudram, Mandya Dist.)

# Date of Visit: 5<sup>th</sup> November 2019

#### 1. SOLAR POWER PLANT, KARNATAKA POWER CORPORATION

On the 5<sup>th</sup> of November 2019 the students of 5<sup>th</sup> semester A and B section, mechanical had the visit SOLAR engineering department opportunity to POWER PLANT, KARNATAKA POWER CORPORATION LTD, Shivanasamudram, Mandya Dist. Almost 86 students along with 5 teaching and 3 non-teaching staffs visited the plant. All are left the college at 8 a.m and reached the site at 10.30a.m then taken the permission from executive engineer of shivanasamudra plant. The plant capacity is 5MW and 10MW, Studentsvisited 10MW capacity plant; Mr. Subhas, plant supervisor explained the plant design, capacity, power generation, supply of power to various cities.

Student got the information on solar radiation, measurement of solar radiation, wind speed calculation, solar panel structure and capacity, Maintenance etc....

The visit to the solar power plant was thought provoking and an experience beyond the theoretical knowledge.



Fig 1.5<sup>th</sup> sem A&B Student along with faculty at KSIT campus



Fig 2.Control room of solar power plant



Fig 3. Solar pannels



Fig 4. Solar power plant of 10MW capacity

### 2. CAUVERY HYDRO ENERGY LTD

Cauvery hydro energy ltd is a power generating company in the private sector actively taking part in augmenting power generation in Karnataka by adding green energy capacities through development of small hydro power projects and supplying green energy to many major corporates. Mr.Ravi,branchincharge of Cauvery Hydro energy ltd given the permission to visit the plant. It is a low head power plant of 8meter head and the plant having two Kaplan turbine, the capacity of that plant is 3MW.intially the water is collected in the forebay through the pipe water enter the turbine, the blades are mounted on the rotor and is connected to the shaft initially it produces 250RPM of speed to step up the speed gearbox is used the it turns to 750RPM,the shaft is connected to generator finally it generates power and the supplies that power to IT sector at Bangalore city.

The student had exposure on hydropower plant working principle practically, design, power generation and the power distribution.



Fig 5.Cauvery Hydroenergy ltd



Fig 6.Forebay of hydropower plant



Fig 7. 3MW Capacity hydro power plant

Finally student visited to gaganachukki falls view and visited to talakadu temple and arrived KSIT at 8.30 PM.



Fig 8.students at gaganachukki falls



Fig 9. Casual photos of students at gaganachukki falls



Fig 10. Gaganachukki falls



Fig 10. Gaganachukki falls

Signature of coordinator

signature of HOD

Signature of Principal