INDUSTRIAL VISIT PANIPAT THERMAL POWER STATION ON 06/12/2022

An Industrial Visit to *PANIPAT THERMAL POWER STATION* (a unit of HPGCL, Govt of Haryana) was organized by EEE Department on 6th December 2022 for 5th and 7th Semester EEE students. A batch of 41 students along with HOD (EEE), Dr. Rajveer Mittal and faculty members Mr. Ashok Goyal and Ms. Jyoti Gupta visited the plant.

Panipat Thermal Plant has a total installed generation capacity of 1360 MW comprising of four units of 110 MW each, two units of 210 MW each and two units of 250 MW each respectively. Four units of 110 MW each were commissioned during 1979 to 1987. These plants have tendered their services and now the generation cost is very high so these plants are now out of service.







| Stage 1 | Unit-1 | 110 MW |
|--------------------------|--------|---------|
| | Unit-2 | 110 MW |
| Stage 2 | Unit-3 | 110 MW |
| | Unit-4 | 110 MW |
| Stage 3 | Unit-5 | 210 MW |
| Stage 4 | Unit-6 | 210 MW |
| Stage 5 | Unit-7 | 250 MW |
| | Unit-8 | 250 MW |
| Total Installed Capacity | | 1360 MW |

TWO MAJOR INPUTS TO POWER STATION:

1. Water:

Water has been taken from near by Yamuna canal. This water is lifted by raw water pumps and is sent to clarifier to remove turbidity of water and further sent to water treatment plant, cooling water system and service water system.

1. **Coal:**

The coal reaches the plant in the railway wagons. The unloading of coal is done mechanically tilting the wagons by tippler. The coal is sent to coal storage yard through conveyor belts. The crushed coal from store is sent to the mill bunkers through conveyor belts.

Students first visited the coal handling plant and seen unloading of the coal and the conveyor belts

Then they were taken to Unit No. VII of 250 MW and shown how steam is used to rotate large Turbines and then Boilers etc. Students have also seen PLC & SCADA software in the Control Room of Unit 7 & 8. Our students asked many questions & queries from the engineers, and got satisfactory and interesting answers. At last students went to SWITCHYARD of Unit 5 & 6, where we know how the produced electricity is distributed to cities and villages.

It was an informative, interesting and a successful visit. The students understood various technical factors which would be very helpful for their understanding of various theoretical aspects studied in their curriculum.

The Institute offers indebtness to Er. Manoj Aggarwal CE (PTPS), Er. Rakesh Gupta XEN (Training), Er. Manu Koshish (AE Training) and Sh. B.M. Verma (AE) GS. without the support & guidance of whom this industrial visit could not have been successful.