

## Industrial Visit of HUBCO

### INTRODUCTION

IMechE NED-UET Student Chapter arranged an industrial visit to HUBCO power plant on Dec 3<sup>rd</sup>, 2019 for the students of NED University of Engineering and Technology belonging to any department to give them the exposure of how engineering is being applied in the industry.

25 students were short-listed for the visit out of 100+ responses including members and non-members of different departments, mostly from Mechanical and Electrical Engineering Departments. The delegation was led by Mr. Muhammad Hammad, General Secretary of IMechE NED-UET Student Chapter.



### PRE-TOUR SESSION

At HUBCO, Mr. Tariq Khan gave a brief introduction of HUBCO and acquainted the visitors with safety precautions and PPE (Personal Protection Equipment). A video showing the safety measures adopted in the plant and the highlights of operations being performed at the workplace was shown.



Mr. , Operation Manager of HUBCO gave a brief presentation about the operation of the power plant producing 1601 MW power of 0.85 power factor and 50 Hz frequency. The plant fulfills 8 – 10% power requirement of the country, which is supplied through 180 km long transmission lines.

### POWER PLANT TOUR

After the presentation, the visitors were offered refreshment. Before going into the field, the visitors were divided into two groups and were provided with the PPE. After the security checks, they got to see the boilers and 220 m high chimneys. The temperature of four boilers is kept at 540°C which produce 1030 tons per hour steam consuming 19000 cubic meter water.



The visitors were then taken to the control room where the whole plant was being monitored from the sea level to the output voltage. The staff members elaborated the whole phenomenon and the mechanism of boilers, HP, IP and LP turbines and the alternator in the control room through the computer system.



The visitors were taken to the turbines working on 3000 rpm rotational speed under 190 – 200 bar pressure and then to the excitation system, which was stepping up 6.6 KV to 550 KV. They also explained different methods of tripping in case of any emergency.



After the industrial tour, the visitors and the staff had lunch together. A picture of the delegation and the staff was captured and the visitors said goodbye to the hosts.

Institution of  
**MECHANICAL  
ENGINEERS**



**HUBCO**

**INDUSTRIAL VISIT**

**3<sup>RD</sup> DECEMBER 2019**

