

Maharaja Surajmal Institute of Technology
Electrical and Electronics Engineering Department
Report

Visit to Tata Power Delhi Distribution Limited

Department of Electrical and Electronics Engineering organized a visit to Tata Power DDL Hands-on Technical Training Centre (HOTT), Sector 11, Rohini, Delhi, on 22 November 2023 for EEE V and VII semester students. Tata Power-DDL Learning Centre imparts various training programs to students, its Internal and External customers including those from various State Electricity Boards in India, and utilities from abroad.

As a part of the 'Train to Hire' program, Tata Power aims to provide hands-on experience to young minds which will further help to groom them with the requisite skills and confidence for handling job roles in the power sector. The association with engineering colleges will nurture and train power distribution sector enthusiasts with the requisite skills through advanced training programs and modules in areas like automation systems, regulations and standards, smart meter technology, energy auditing, meter testing, etc.

The company will curate a 6 months training program specifically for engineering and diploma students to enhance their knowledge competency and share some best practices. Students who undergo this program will be considered during the recruitment process.

At HOTT students were shown the presentation of their learning center which includes their facilities (i.e. classrooms, food facility, outdoor games, gym, technical instruments, etc.). **Train to Hire** program was briefed to students. Students visited the protection zone at HOTT that is needed during the maintenance of equipment. Since its inception in 2002, TATA POWER reduced the Aggregate Technical and commercial losses (AT&C) which is the combination of energy loss (Technical loss + Theft + inefficiency in billing) & commercial loss (Default in payment + inefficiency in collection) from 50% to 6-7% by replacing all the ACSR wires with ABC (air bunch cables) which have insulation on their surface, mechanical disc type power meter with digital meters. The advantages of this are that no one customer will be able to theft the electricity. All radial systems are replaced with ring main systems to provide a reliable supply to the customer. Students learned about different types of transformers (pole-mounted, plinth-mounted, single phase pole mounted), different parts of the transformer, their maintenance schedule, poles, LT, and HT cables. The visit gave the students exposure to current work practices as opposed to theoretical knowledge being taught in their college classrooms. Students learned a lot of things that will help in their development and also for the future.

