Chettinad College of Engineering & Technology, Karur

Department of Electrical and Electronics Engineering

News Report

Programme Name: Field Trip
Date: 22-10-2024
Class & No. of Participants: III Year & 40 Students
Location: Puliyur Substation
Faculty incharge: Mr. M. Vasanthprakash, AP/EEE & Mr. P. Pandi, Sr. AP/EEE

Description:

On October 22, 2024, the department of Electrical and Electronics Engineering organised a field trip to Puliyur Substation for III-year EEE 40 students, accompanied by 2 faculty members, Mr. M. Vasanthprakash, AP/EEE, and Mr. P. Pandi, Sr. AP/EEE. The purpose of the visit was to provide students with practical exposure to the functioning of an electrical substation and to understand the real-time applications of the theoretical concepts studied. Puliyur Substation is a critical node in the region's power distribution network that handles the transformation of high-voltage electricity from power plants to lower voltage levels suitable for distribution to residential, commercial, and industrial areas. The substation is equipped with modern equipment, including transformers, circuit breakers, relays, and control systems.

Upon arrival, the students were welcomed by the substation's engineering team, Mr. R. Kirubhakaran, Assistant Executive Engineer (AEE), and Mr. R. Perumal, Junior Engineer (JE), who gave a brief overview of the substation's operations and its significance in the power grid. The students were then taken on a guided tour of the substation. They observed the main components, such as transformers, circuit breakers, and protective devices. The engineers explained how power is stepped down from higher to lower voltages and the role of each component in ensuring stable power supply. A visit to the control room allowed the students to see how the substation is monitored and controlled. They were introduced to the SCADA (Supervisory Control and Data Acquisition) system, which enables remote monitoring and control of various substation operations.

During the interactive Q&A session with the engineers, questions about the challenges of managing a substation, the future of renewable energy integration, and the evolution of power systems were discussed. The field trip to Puliyur Substation was highly educational and informative and provided the students with valuable insights into the real-world functioning of electrical substations, which enhanced their understanding of electrical engineering concepts.

Field Trip Photos:


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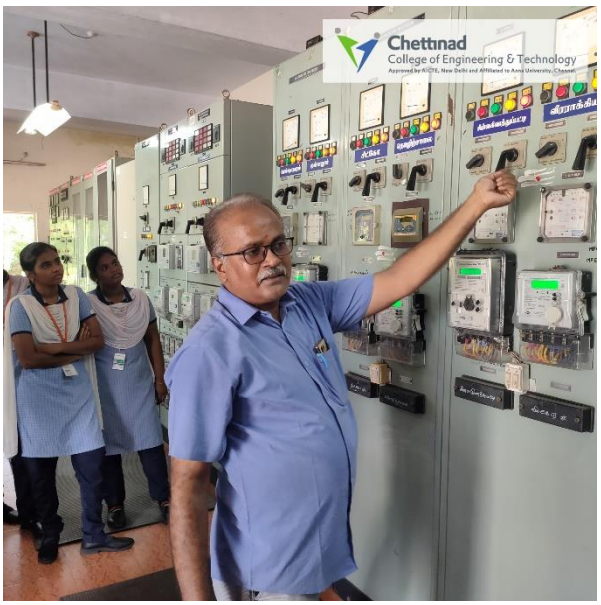
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