## Industrial visit report 2016-17 II

## 1) Brief outline of key issues and challenges addressed in the event

The second year students of EEE department went for an Industrial Visit to Transformer Repair & Maintenance and 33/11 KV SS SPM Section, APSPDCL Goginenipuram, Nellaturu, on 10-01-2017 The students were studying transformers in the current semester

The industrial visit to this transformer manufacturing unit was very informative and students could actually see the assembly of cores, primary and secondary windings, the various types of insulation used in the windings, types of protection used, testing, etc., 33/11kv air cooled and oil cooled transformers.



## 2) Key messages, outcomes, recommendations

**Key Points:-**

- Construction of Winding
- Construction of Core
- Core Assembly
- Tanking and Oil filling
- > Testing

## 3) Conclusions by the Chair of the event

They were explained with basic concepts and operation of three phase power and distribution transformers. The fabrication process of transformers in core and winding design was observed by them with keen interest. The low voltage and high voltage winding machines were shown to students and the process of winding along with insulation was demonstrated to students. This session was well received by many students since that was part of their curriculum/project. The limb and the frame sections of transformer core were also explained to students. The process of eliminating moisture by heating the transformer in high temperature furnace was also demonstrated.

In latter session all the students were taken round the industry to observe assembling of Transformer windings, core and yoke etc .Also various test procedures open circuit ,short circuit load test including insulation test are demonstrated to the students batch wise .In assembly division and in testing division respectively. At the end of the visit students enthusiastically involved in getting clarifications over their doubt