



ELECTRICAL AND ELECTRONICS ENGINEERING

EVENT REPORT

Name of Event	Industrial visit
Date(s) of Event	23-04-2022
Type of Event	Industrial visit at 2.5MW WIND FARM PROJECT NARSINHAKONDA
Resource Person and Contact Details	-----
No of participants	II EEE and III EEE students (27)
Organized Department	EEE
Reporter's Name and Contact Details	Mr.D.RAJESH REDDY Assistant Professor Department of EEE Narayana Engineering College, Gudur. A.P Ph:9440390725 Email:rajeshreddy238@gmail.com
Panelists	Dr.K.P.Prasad Rao, Prof &HOD-EEE Mrs.V.Swarna ,Assoc.Prof

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

Our main purpose for this visit is to be familiar with industrial environment and to get practical knowledge of electrical power generation through Renewable source Energy.

Students will get the idea of electrical power generation, Transmission and distribution. Students will also get familiar with Wind Mill, Wind Turbine and its parts

2) Key messages, outcomes, recommendations

Key Points:-

➤ How Electricity is generated:

The wind direction rotates the wind turbine to face into the wind. The energy in the wind (called kinetic energy) turns the turbine blades around the rotor (creating mechanical energy). The rotor connects to the main shaft, which turns inside the generator housing. Here, a magnetic rotor spins inside loops of cooper wire. The electricity generated then travels down large cables from the nacelle, through the tower, and into an underground cable. At wind farms, cables from different turbines take the electricity generated to a substation. Here, a step-up transformer again increases the electrical output. A transmission line connects the electricity output at the substation to the electrical grid serving communities throughout the region.



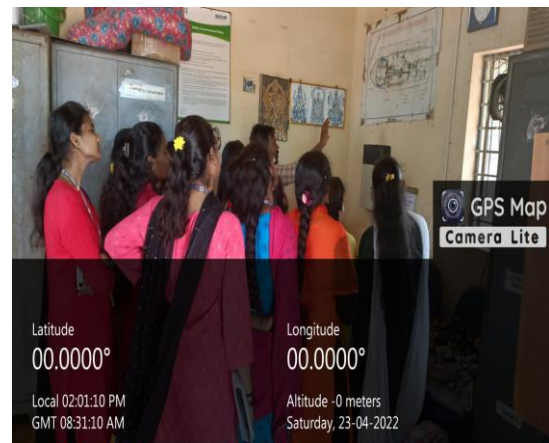
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- **Types of Generator Used:** (i) Single winding: It is run on 1000 rpm
(ii) Double Winding: It is run on 750 rpm
- **Wind Mill Capacity:** Capacity of wind mill 2.5MW
Height of the wind mill is 30 meter

3) Conclusions by the Chair of the event

From this visit, we got the information and practical knowledge about Power Generation through wind mill and transmission and distribution of power. Student got the knowledge about wind mill, wind turbine, generator. They got the idea how electricity is generated through wind mill and types of generator and their connection and from the control panel how to take reading and how to manually stop wind mill. About 75 students of Seond year & IV year I Semester Electrical & Electronics Engineering Class of NarayanaEngineering college Gudur

We are especially thankful to respected SRI V. RAMALINGAIAH District Manager, NREDCAP LTD Nellore division because they granted us permission.



Incharge

HOD/EEE