



**NARAYANA ENGINEERING COLLEGE :: GUDUR**  
(Approved by AICTE, Affiliated to JNTUA & An ISO 9001-2015 Certified Organization)  
**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

**EVENT REPORT**

Name of Event	Industrial visit
Date(s) of Event	<b>21-09-2019</b>
Type of Event	Industrial visit at 2.5MW WIND FARM PROJECT NARSINHAKONDA
Resource Person and Contact Details	-----
No of participants	II EEE -35
Organized Department	EEE
Reporter's Name and Contact Details	Mr.P.Sudhakiran Assistant Professor Department of EEE Narayana Engineering College, Gudur. A.P Ph:7330781661 Email: sudhakirann.ponnuru@necg.ac.in
Panelists	Dr.J.A.Baskar Prof &HOD-EEE Dr.V.Ravi Prasad- Vice principal, Mr.N.Chenchiah - 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

#### **➤ 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 35 students of Seond 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

**HOD/EEE**

