NARAYANA ENGINEERING COLLEGE::NELLORE

AUTONOMOUS

DEPARTMENT OF EEE

Report On Industrial Visit

1.	Name of the Activity/Event	Dr Narla Tata Rao Thermal Power Plant		
2.	Date of Activity/Event	03/06/2022		
3.	Organized by/Name of the Committee	Department of EEE		
4.	Place of Activity/Event	Narayana Engineering College, Nellore		
5.	Resource Person/Guest/Organization	1.Mr.K.Lakshmi Ganesh 2.Mr.D.V.Brahma Naidu 3.Ms.M.Leela Mounika 4.Mrs.N.Yamini		
6.	Type of Activity/Event	Industrial Visit		
7.	Activity/Event objectives	1.Breif analysis of Power system generation. 2.How to generate power in Thermal Power Plant.		
8.	Participation	Students	Faculty	Total Participation
		53	4	57
9.	General remarks	-		
10.	Enclosures	1. Photos 2.Attendance Report 3.Undertaking forms from students 3.Train Tickets		

It is bring to your kind notice that III B.Tech EEE students was visited Dr. Narla Tata Rao Thermal Power Plant, located at Vijayawada in Andhra Pradesh. About 53 members students along with 4 staff members on 03/06/2022.

The Site Engineer was given complete demo about the power system generation. Dr. Narla Tata Rao Thermal Power Plant is also known Vijayawada Thermal Power Plant. It was developed under 4 stages, with the project cost of Rs 193 Crores and Rs 511 Crores respectively. Again with an investment of RS 840 Crores 2 units were commissioned under III Stage. The seventh unit of 500 MW was commissioned in 2009. The station stood first in country during 94-95, 95-96, 96-97, 97-98 and 2001-02 by achieving the highest plant load factor. The station has received many prestigious awards from various organizations.

Capacity of the plant:

Stage	Unit Number	Installed Capacity (MW)
Stage I	1	210
Stage I	2	210
Stage II	3	210
Stage II	4	210
Stage III	5	210
Stage III	6	210
Stage IV	7	500
Stage V	8	800 (yet to be started)

Working of the plant:

The power plant is categorized into 4 houses based on its functioning. At first we visited coal storage and coal handling station. The coal brought through wagons are automatically lifted by mechanical arms and sent to boilers through underground conveyor belts. The motors used are induction motors.

In the second stage the coal is pulverized into smooth powder and fed to boiler along with crude oil, water and air.

The third stage consists of a set of three parts, each containing a low pressure, high pressure turbines coupled with an alternator and each has generating capacity of 210 MW.

In the final stage we visited the cooling towers. At Last we visited the UCB Room Unit control Board Room where the whole process is monitored by control board members and at the time of emergency they will inform the authorities concern.

Figure:1 name plate details of 210 MW unit (BHEL Make)

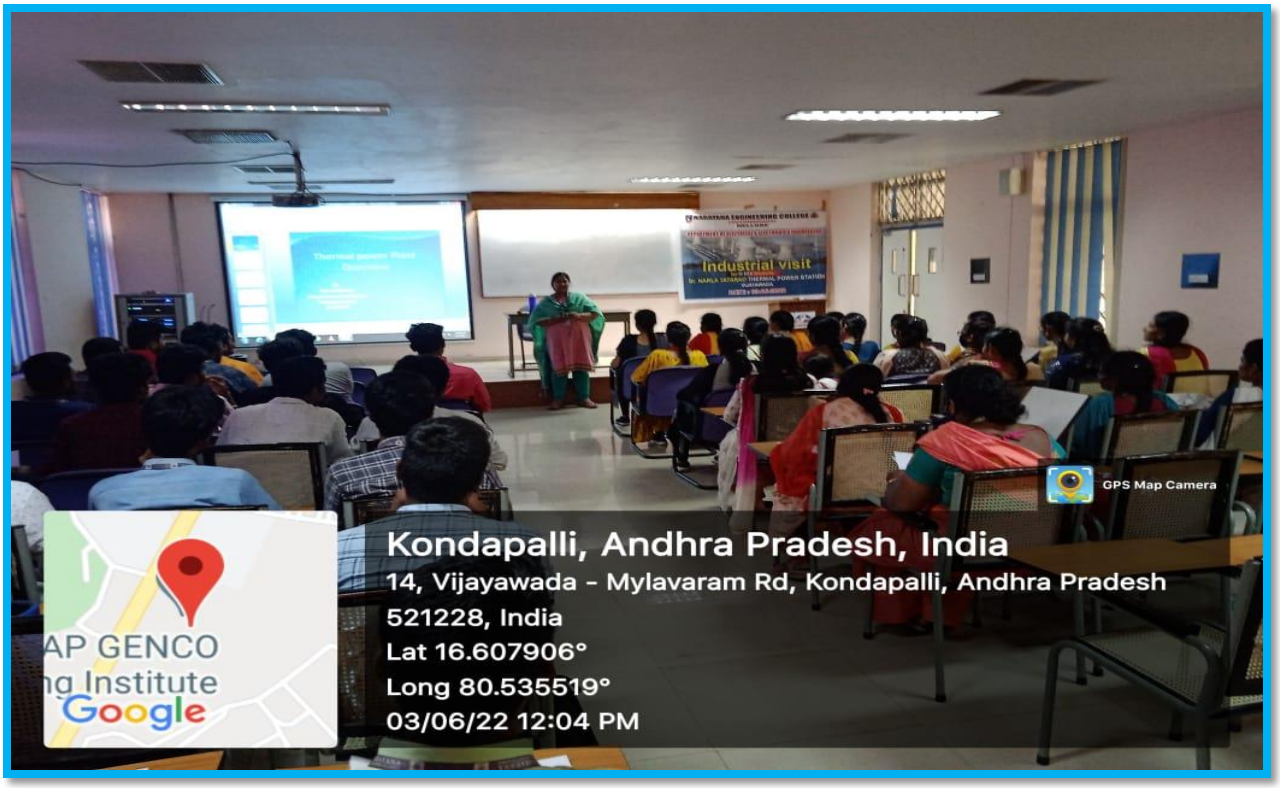

Figure:2 PPT presentation by DEE (Thermal Power Plant Operation and Dr.NTTPS plant)

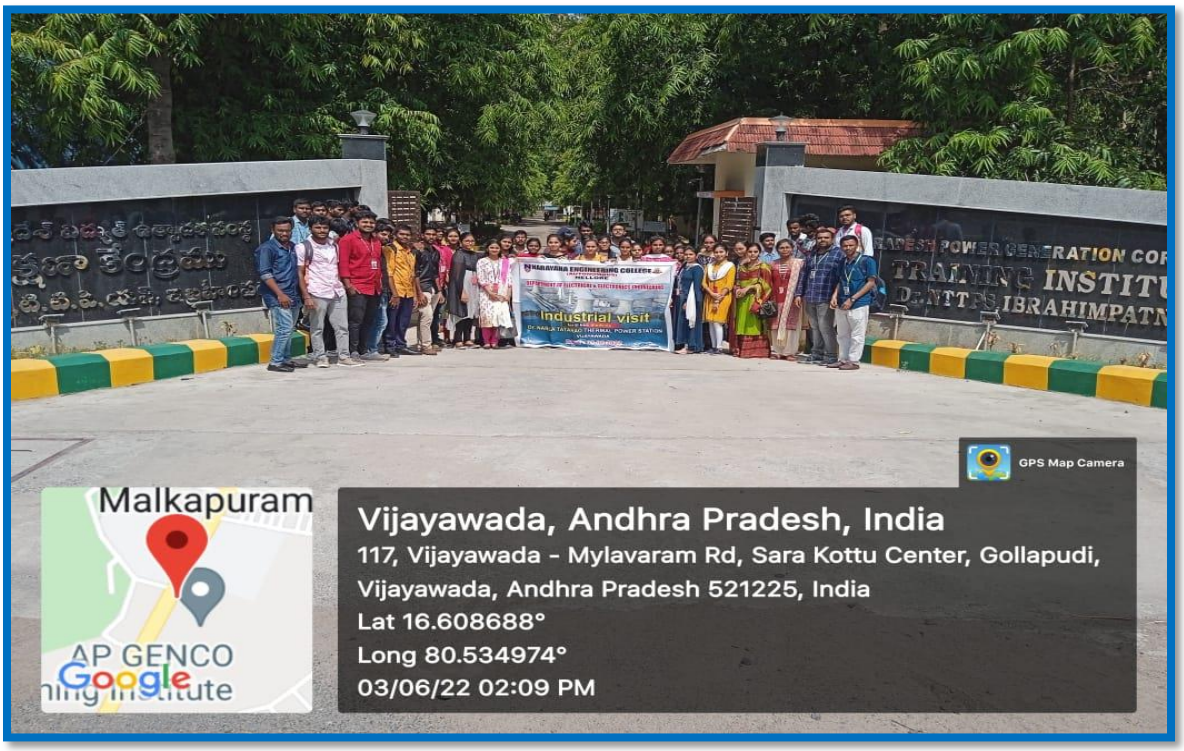

Figure:3 Students to visit of Dr. NTTPS Power Plant