

# Report on Industrial visit Dr. Narla Tata Rao Thermal Power Station

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By

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## **Thermal power plant**

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 has received many prestigious awards from various organizations.

### **POWER GENERATION**

<b>Stage</b>	<b>Unit number</b>	<b>Installed capacity(MW)</b>
<b>Stage I</b>	<b>1</b>	<b>210</b>
<b>Stage I</b>	<b>2</b>	<b>210</b>
<b>Stage II</b>	<b>3</b>	<b>210</b>
<b>Stage II</b>	<b>4</b>	<b>210</b>
<b>Stage III</b>	<b>5</b>	<b>210</b>
<b>Stage III</b>	<b>6</b>	<b>210</b>
<b>Stage IV</b>	<b>7</b>	<b>500</b>

#### **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 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.

Finally, we left the premises at 5.30 p.m and reached Guntur at 7.10 pm, It was an informative, interesting and a successful visit.

**HOD**