

**A Report on One Day Industrial Visit to Rayalaseema Thermal Power Project (RTPP)
Muddanur, Kadapa, A.P
Organised by Department of Mechanical Engineering
On 31.03.2024**



Submitted by: Mr. Raghavendra H, Asst Professor, Dept. of ME; Mr. Jagannath Pattar, Asst Professor, Dept. of ME
No. of students visited: 38
Year & Semester: III B.Tech. II semester

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Industrial visits offer students invaluable exposure to authentic working environments, encompassing workstations, plants, assembly lines, machinery, and systems, along with the chance to engage with seasoned professionals. These visits facilitate significant learning experiences that contribute to students' personal and professional development, preparing them for the future. Moreover, industries operate within structured frameworks of rules and regulations, adhering to specific timelines for tasks. This presents an excellent opportunity for students to grasp the importance of planning and meeting deadlines effectively. Interacting with industry professionals provides insights into their workflow, organizational strategies, and methods for achieving progress, offering invaluable lessons for student. To provide practical exposure and industry insights, an educational excursion to the Rayalaseema Thermal Power Project (RTPP) in Muddanur was arranged for third-year Mechanical Engineering students on March 31st, 2024.

ABOUT RTPP PROFILE:

Rayalaseema Thermal Power Project is located at Yerraguntla (Md) in Kadapa District in Andhra Pradesh. The power plant is one of the coal-based power plants of APGENCO. The Thermal Power Station has a capacity of 1650 MW; 5 units of 210 MW each and 1 units of 600 MW as listed below.

Plant	Installed Capacity (MW)	Date of Commissioning	Status
I	2X210	1994	Commissioned
II	2X210	2007	Commissioned
III	1X210	2010	Commissioned
IV	1X600	2018	Commissioned

RTPP was developed under 3 stages namely stage I, II, and III. The station has been performing well in the recent years by achieving a high plant load factor. It stood first in the country during 1998–99, 2002–03, 2003–04 and second during 1999–2000, 2001–02. The station has received Meritorious productivity awards for six consecutive years and Incentive award for seven consecutive years. BHEL commissioned stage IV unit 1x600MW in March 2018 leading to total installed capacity of RTPP to 1650MW.

The Details of the visit are as follows:

The Department of Mechanical Engineering, MITS, Madanapalle organized a one-day Industrial Visit to “**Royalaseema Thermal Power Project**”, Muddanur, Kadapa, AP on 31st March 2024 for Third year students. The visit was organized with the prior permission and guidance of **Dr. C. Yuvaraj** Professor & Principal, **Dr. C. Kamal Basha** Professor & Vice Principal (Administrative) and **Dr. S. Baskaran** Assoc. Professor & Head of the Department. A total of 38 students along with 2 faculty members have joined the visit.

1. We started from our college premises sharply at 07:10 A.M. on 31st March 2024.
2. Reached Royalaseema Thermal Power Project by 11:45 A.M.
3. At 12.00 P.M. We are welcomed by the Sri G Ramalingeswara Reddy (ID.No.1061959) Asst. Engineer along with the S.P.F Staff they gave instructions before visiting the company. They also had given oral explanation about the RTPP company overview. This makes the students to know about the company.
4. Between 12.30 P.M to 1.45 P.M Sri G Ramalingeswara Reddy, AEE, RTPP elaborated the functioning mechanism of the Royalaseema Thermal Power Project (RTPP).



Field Visit Information:

The students visited all segments of the Power Plant and interrogated with the experts. Various segments like

1. Unit Control Board (UCB)
2. Main Control Room (MCR)
3. Mills (pulverized coal)
4. Feed Water Floor
5. Boilers
6. Bunkers
7. Turbine Floor
8. Switch yard
9. Generator Transformer Yard
10. Condensers Floor
11. Cooling Tower pump house

During the visit, students gained valuable insights into the internal operations and functionality of the plant, enhancing their understanding of practical aspects and acquiring useful information. The interactive nature of the visit facilitated effective learning, allowing students to grasp the innovative technologies employed within the plant.

Finally, at the end of the session at 2.00 P.M. Our faculty **Mr Jagannath Pattar** on behalf of MITS College of Engineering, has given a vote of thanks for the “**Royalaseema Thermal Power Project**” for giving a great opportunity to visit the plant.

At 2.15 p.m., we started a return journey to the college



Event Photography of Inauguration, felicitation, event conduction and valedictory ceremony.

Industrial visits offer students a significant opportunity to engage with industry experts, professionals, policymakers, entrepreneurs, and corporate leaders, who generously share their insights, knowledge, and experiences. These interactions are invaluable for students as they aid in their career development, fostering the growth of leadership qualities, management skills, and a deep understanding of industry operations, thereby enhancing their prospects for securing rewarding employment in the future.

The visit was highly interactive, facilitating effective learning as students gained first hand exposure to the innovative technologies employed within the plant. We express our heartfelt appreciation to the Management, Principal, Vice Principal, Head of the Department-ME, and Transport In-charge for their unwavering encouragement and steadfast support in orchestrating and coordinating this enriching industrial visit