



Department of Electrical & Electronics Engineering

A Report on Industrial Visit
to
“Rayalaseema Thermal Power Project (RTPP)”
Muddanur, Kadapa, Andhra Pradesh

Submitted by	: Dr. Thurai Raaj V.B Assistant Professor & Dr K. Arul kumar , Associate Professor
No. of students visited	: 59
Year & Semester students	: III Year I semester B. Tech III Year EEE-B
No. of faculty Members accompanied	: 04
Date of Visit	:18.12.2022

One-day Industrial Visit to Rayalaseema thermal Power Project (RTPP), Muddanur was organized for the III Year I semester B. Tech, EEE-B students on 18th December 2022.

Faculty Accompanied:

1. Dr. Thurai Raaj VB
2. Dr. K. Arulkumar
3. Mrs. Revathi
4. Mr. Madhu

The Industrial Visit to RTPP, started at 6.15 AM by college bus and reached the plant by 11.30 AM. Total crew was divided into five batches with a size of 12 students under the guidance of each faculty member. The students along with faculty members visited the plant between 12 .00 PM and 2.00 PM. **Sri P. Hari Babu**, AEE/O&M/ Stage-II/RTPP elaborated the functioning mechanism of the Rayalaseema Thermal Power Project (RTPP) and strongly insisted the safety precautions that should be adhered during the visit.

About RTPP:

Rayalaseema Thermal Power Station 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.



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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 is performing well in the recent years by achieving high plant load factor. It stood first in country during 98–99, 2002–03, 2003–04 and second during 99–2000, 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.

Field Visit Information:

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

- i) Cooling Towers
- ii) Unit Control Board (UCB)
- iii) Main Control Room (MCR)
- iv) Turbine Floor
- v) Switch yard
- vi) Generator Transformer Yard
- vii) Boilers
- viii) Bunkers
- ix) Mills (pulverized coal)
- x) Cooling Tower pump house

were visited by our students. The students learnt the internal functioning mechanism and observed the working environment of the plant by undergoing the visit. They experienced the operation of each segment by visualizing their practical aspects. Explanation was given on stator and rotor design of generator produced by BHEL.



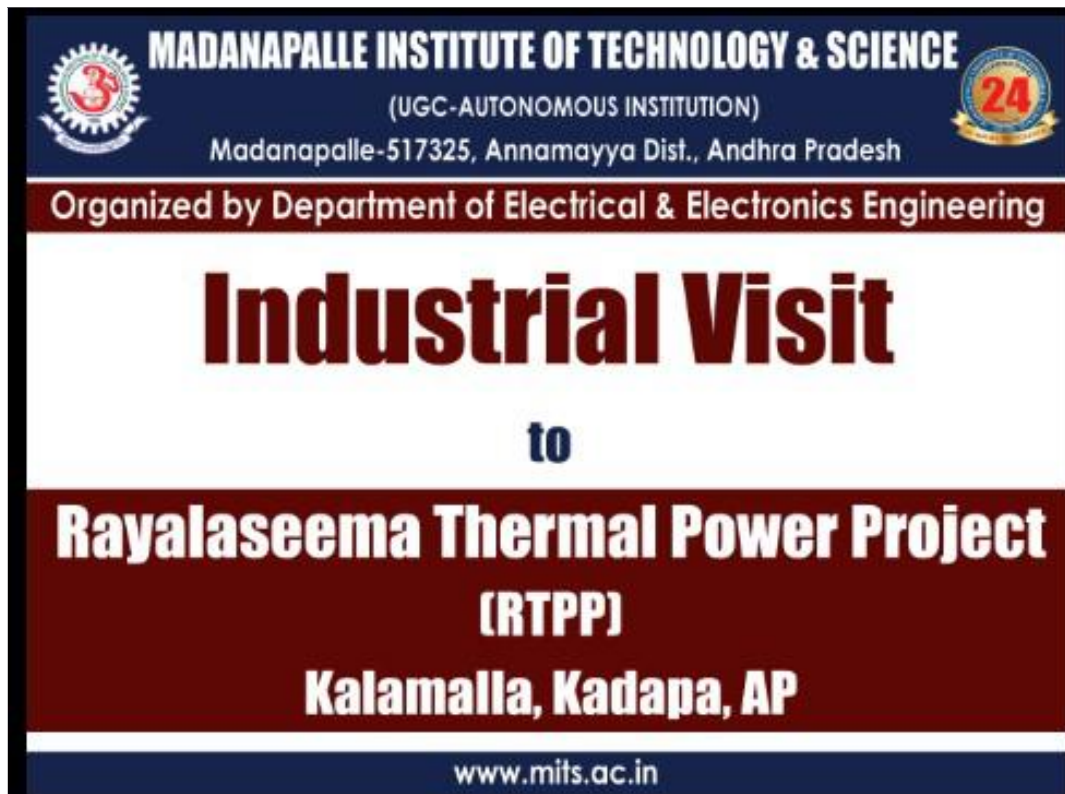
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Students also visited the relays, lighting arrestors in the sub station and known about the insights.

The visit was more interactive with effective learning and the students were made to learn the innovative technology implemented in the plant.

We extend our sincere gratitude to the Management, Principal, Dean-Administration, Vice Principal (Academics and Administration), Associate Dean-IIIC, and our Head of the Department-EEE for their fruitful encouragement and constant support for arranging & organizing the industrial visit.

Photos:



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ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED
RAYALASEEMA THERMAL POWER PROJECT

From
The Chief Engineer/O&M,
R.T.P.P., V.V. Reddy Nagar,
Y.S.R. Kadapa (Dist.)

To
The Principal,
Madanapalle Institute of
Technology and Science
Madanapalle-517325
Chittoor (Dist.)

Lr.No. CEO&M/RTPP/SE/A&MM/EE/(Adm)/PO(BY)JAO/T/D.No. 5050/22, dt 15-12-2022

Sir,

Sub- AP GENCO – RTPP – Industrial Visit permission to 60 Nos. Students and 05 Nos Faculties of Madanapalle Institute of Technology & Science, Madanapalle on 18-12-2022 (Sunday) - Permission – Accorded.

Ref- Representation dt 02-12-2022 from the Principal Madanapalle Institute of Technology & Science, Madanapalle

With reference to the above, it is to inform that permission is hereby accorded to 60 Nos. Students and 05 Nos. faculties of Madanapalle Institute of Technology & Science, Madanapalle to visit R.T.P.P. between 01.30 PM to 05.00 PM on 18-12-2022 (Sunday) as study tour.

The following are the terms and conditions while they are in plant visit.

- 1) The students may be attached to Sri P. Hari Babu (ID.No. 1073601) Asst. Executive Engineer/I&C/ Stage-II/RTPP along with S.P.F Staff.
- 2) Necessary instructions may be issued to the students with regard to safety measures/precaution to be followed.
- 3) No fees shall be collected from the students.
- 4) The college/school shall depute their faculty members to monitor during the plant visit.
- 5) The students should follow all the safety precautions such as WEARING HELMET, IDENTITY CARD, SHOES, TUCKING INSHIRT, WEARING APRON FOR LADIES DURING PLANT VISIT and AP GENCO shall not be liable for any type of injury/accident occurred to your students.
- 6) The students shall have to make their own arrangements for lodging, boarding and transport on the day of visit to RTPP.
- 7) The students shall be held responsible for any loss/damage caused to the AP GENCO equipment.
- 8) No Electronic goods are allowed in side the plant premises including TABS, CELL PHONES, CAMERAS etc.,
- 9) The students are strictly instructed not to wander in the Project/ Colony premises & they should accompany with their guide only.
- 10) The guide must accompany with their students. If any violation of the students is noticed like taking photos & Selfies and going to edges of highest places the guide will be punished.

You are requested to advise the concerned staff to meet Sri P.Hari Babu (ID.No. 1073601) Asst. Executive Engineer/I&C/Stage-II/RTPP

Jay
15/12/22
For CHIEF ENGINEER/O&M/RTPP

Copy to the :

- 1) Asst. Commandant/SPF/RTPP. For necessary action please.
- 2) Assistant Security Officer/F&I/RTPP.
- 3) Sri P. Hari Babu (ID.No. 1073601) Asst. Executive Engineer/I&C/Stage-II/RTPP He is directed to co-ordinate the plant visit and necessary guidance to the students during the plant visit based on the consent given by him. He will be solely responsible for the safety and security of the students during the period of plant visit.

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Madanapalle Institute of Technology and Science,
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FEEDBACK REPORT ON INDUSTRIAL VISIT

CLASS: B. Tech III Year SEMESTER : ODD ACADEMIC YEAR : 2022-23
Name and Address of Industry Visited: Rayalaseema Thermal Power Plant Yerraguntla, Kadapa, A. P.

Date : 18/12/2022 Duration : 01:30 to 5:00pm

Beneficiary Dept. : EEE Year/Semester: III / I

Total No. of Students: 58

Industrial Visit organized by: Dr T S Balaji Damodhar, Assistant Professor, Dept. of EEE

Name of Industrial Visit in-charge and other Faculty who accompanied the students:

Site In charge: Mr. Harri Babu

Other Faculty Names:

1. Dr. V. B. Thurai Raj
2. Dr. K. Arul Kumar
3. Mrs. K. Revathi
4. Mr. Madhu
- 5.

Contact Person at Industry:

Visit related to the subject:

1. Thermal power generation system,
2. Electrical Power Generation Systems,
3. Transmissions systems and
4. Protective Systems

During visit the students were taken to following Departments in the Industry

1. we thought got information on control units, we saw the turbines exciters, electro static precipitator, boiler, Coal handling unit,
2. Ash handling unit, Battery storage system, step-up transformer, Master Control unit, and finally cooling tower.

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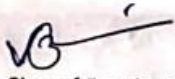
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Names of Student who offered feedback (Feedback enclosed)

1. Bharathi G.S
2. M. Rohini
3. M. G. Ravi Kumar Reddy
4. G. Ganesh
5. K. Haini

Sign. of Industrial Visit in- charge with Seal:

 18/12/22
Assistant Executive Engineer
I&C, Sub Division-V, Stage-II
RTPP/APGENCO


Sign of Faculty In-charge


Sign of Faculty Organizer


Signature of HoD

Encl:

1. Industrial Visit report with photographs,
2. Permission letter

Head of the Department
Electrical & Electronics Engineering
Madanapalle Institute of Technology & Science
MADANAPALLE - 517 325