

Institute of Engineering & Technology (Autonomous)

Institution of Engineers (India)-Student Chapter-EE Department of Electrical & Electronics Engineering



AY 2019-20

# Annual Report - Events Conducted

Vinay Kumar A
Co-Ordinator, ISTE/ IEI/ EEC

Sl.No.	Event	Title	Targetted Participants	Date	No. of Participants	Resource Person
1	Industry Visit	IEI-EEE has organised visit to State Load Dispatch Centre	UG student & Faculty	08-Jan-20	30+2 = 32	Mr. Srinu Naik, ADE State Load Dispatch Centre, TS Transco.
2	Industry Visit	IEI-EEE has organised visit to 220/132kV Substation	UG student & Faculty	24-Jan-20	57+3 = 60	Mr. Vidya Sagar, AE 220/132kV GIS Substation, Erragadda
3	Industry Visit	IEI-EEE has organised visit to 400/220kV Substation	UG student & Faculty	28-Jan-20	58+2 = 60	Mr. K Shashank, AE 400/220kV Substation, Shankarpally
4	Technical Talk	IEI-EE Student Chapter has organised a Technical Talk on "Optimal operation of Power system with renewable energy sources, battery storage and Electric vehicles"	UG/ PG Students and Faculty	12-Mar-20	49+11+17 = 77	Dr. Surender Reddy Salkuti, Woosong University, Korea
5	Extra Curricular Activity	IEI-EE Student Chapter has organised an Online "QUIZ ASP-20"	UG Studens of GRIET and other college students	07-Apr-20	14+18=32	Online <b>QUIZ - ASP-20</b> (Awareness of Social Problems) #Fight Covid-19

Total Events				
Industry Visits	3			
Guest Lectures				
FDP/Workshop				
Seminar/Webinar	1			
Co-Curricular & Extra-curricular	1			
Total	5			

**Co-Ordinator** 

HOD,EEE

### 1. Industry Visit

Date: 8th January 2020

Time : 10:00 A.M-2:00 P.M

Venue: State Load Dispatch Centre, TS Transco, Hyderabad.

The Department of EEE conducted an industrial visit for B.Tech 3<sup>rd</sup> year students (30) along with 2 faculty to State Load Dispatch Centre TS Transco at Vidyut Soudha, Khairatabad, Hyderabad. In the SLDC, they mainly explained about Power Generation and Distribution across the Telangana State, details about Load Curves of state Load demand curve, SPDCL& NPDCL Load Demand curves, GHMC Load Demand curve and Solar Power Generation curve with Weather condition and cloud moving, Planning Schedule for tomorrow's demand and compare with Actual demand, the layout of 400kV & 220kV substation network in Telangana and inter connected lines with other states. They showed everything on the big screen. Students understood the basic concepts clearly about Generation and Distribution across the state and clarified their doubts. This visit was very much useful to their study of engineering towards their career in core industries.







## 2. Industry Visit

Date: 24<sup>th</sup> January 2020

Time : 10:00 A.M-2:00 P.M

Venue: 220/132kV GIS Substation, Erragadda.

The Department of EEE conducted an industrial visit for B.Tech 3<sup>rd</sup> year students (60) along with 3 faculty to 220kV GIS Substation TS Transco at Erragadda, Hyderabad. In The GIS Substation, they mainly explained about Advantages of GIS Substation compared to airinsulated substation, Equipments used in the GIS substation and working of each device (CST, Surge Arresters, CVT, CT, Isolators, Bus Bar, Earth Switch, Circuit Breaker, Transformer and CET) and single line diagram of 220/132kV network with incoming and outgoing lines within the substation. They showed each and every device used in the GIS substation. Students understood the basic concepts clearly about Transmission and Distribution in the Power System Network and clarified their doubts. This visit was very much useful to their study of engineering industries. towards their career in core









## 3. Industry Visit

Date: 28th January 2020

Time : 10:00 A.M-2:00 P.M

Venue: 400/220kV Substation, Shankarpally.

The Department of EEE conducted an industrial visit for B.Tech 3<sup>rd</sup> year students (60) along with 2 faculty to 400kV air-insulated Substation TS Transco at Shankarpally, Hyderabad. In The Substation, they mainly explained about necessity of substation and compare AIS&GIS Substation, Equipments used in the AIS substation and working of each device (Lightning Arresters, Lightning Masks, CVT, CT, Isolators, Bus Bar, Earth Switch, Circuit Breaker, Transformer and Reactor), single line diagram of 400/220kV network with incoming and outgoing lines within the substation and how to remotely control the Isolator and Circuit Breaker in the control panel available in the control room. They showed each and every device used in the AIS substation. Students understood the basic concepts clearly about Transmission and Distribution in the Power System Network and clarified their doubts. This visit was very much useful to their study of engineering towards their career in core industries.







## GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Electrical and Electronics Engineering Industrial Visit to 400/220kV Substation on 28<sup>th</sup> Jan 2020 Shankarpally, Hyderabad-501203





### 4. Technical Talk

Date : 12 March 2020

Time : 11:00 A.M-12:00 P.M

Venue: Seminar Hall-4412, GRIET.

Gokaraju Rangaraju institute of Engineering and technology, Department of Electrical and electronics Engineering organized a guest Lecture by IEI on "Optimal operation of power system considering Renewable energy sources" on 12<sup>th</sup> march 2020 at the EEE Seminar Hall.The guest speaker Was Mr.Surender Reddy salkuti,Associate professor in the Department of Railroad and Electrical Engineering, Woosong university, Daejeon ,Republic of korea.

The event started with a Welcome address by Danish, Later He then requested Mr. Surender Reddy Salkuti to deliver the lecture.

Mr. Surender Reddy Salkuti expressed his gratitude for being there among students and then introduced himself and started his lecture. Sir then gave a brief introduction of the topic by explaining how to handle the uncertainty of modeling wind and solar power. He spoke about the Importance of demand—side management, why Renewable energy is preferred, Issues associated with high penetration of Renewable Energy Resources (RERS), Integration of Renewable power into Electrical markets. He also came up with Optimal power Flow (OPF), the capacity of wind generation, thermal generation. Sir then told about the best technique is used between conventional and metal used techniques, Fuel cost minimization, Loss minimization, modeling of wind energy system. Sir also discussed about programs that should be used for wind speed & probability distribution, load forecast uncertainty model, modeling of solar energy system, modeling of solar PV uncertainty, modeling of electric vehicles(EVS). He also explained about the types of equality and inequality constraints, load demand, wind demand and solar irradiation. He then concluded his lecture by clarifying the queries of the students.

















5. QUIZ: ASP-20 (Awareness of Social Problems) #Fight Covid-19.

**Date** : 7 April 2020

Time : 10:00 A.M-12:00 P.M

**Venue: Online Event** 

Gokaraju Rangaraju institute of Engineering and technology, Department of Electrical and electronics Engineering, IEI-EE has organised an online-QUIZ on Awareness of Social Problems (ASP-20) in amid Covid-19 and has initiated to get the awareness of Corona Virus using an online platform. It was good response from the other college students who have participated in the QUIZ apart from the GRIET students. Total 32 students have participated including 18 students from other institutions. All participants were actively participated in the ASP-20.

