

Sarvajanik Education Society

Sarvajanik College of Engineering and Technology



Faculty of Electrical Engineering

Expert Talk

On

“Generator Protection”

An Expert talk has been arranged to target the students of BE III and BE IV year, Faculty of Electrical engineering covering the subjects of Switchgear and Protection. Objective of the talk was to give brief idea generator Practical design and Its Protection and problems related with generator Protection.

Resource Person: Dr.Vijay Makwana, Prof. & Head, Electrical Dept, GCET, Anand, V.V.Nagar

Venue: E.C.A.V ROOM

Date & Time: 13th September 2017, 10:30 am onwards

Participants: (50 +) 3rd and 4th Year Undergraduate Students

Brief Introduction of Speaker:

Dr. Vijay Makwana has been serving as Professor & Head of Electrical Department, GCET since May 2017. He completed BE, ME from BVM and PhD from Sardar Patel University. He has 15 years of teaching experience.

Dr. Makwana has published 12 papers in various international journals and 6 papers in various international conferences. He has written a book Power System Protection and Switchgear, published by Tata Mc-Graw Hill. He has also written a monograph Transmission Line Protection Using Digital Technology, published by Springer at International Level.

He is a reviewer of several most reputed international journals; listed as, IEEE Transactions of Power Delivery, IET-GTD, Elsevier and Taylor & Francis. He has developed Basic Electrical Laboratory and Power System Protection Laboratory of Electrical Department, GCET. He has been invited to deliver Expert Talk on various topics related to Power System Protection domain by many engineering colleges, namely, BVM, CHARUSAT, SVIT, SCET, GEC Surat, PIT, PIET, ITM and VVP. His research interest includes power system protection, Flexible AC Transmission Systems, power system stability and control, power system modeling and simulation. During his academic carrier, he guided 65 BE and 6 ME students. Presently, 3 students are pursuing PhD under his supervision from Gujarat Technological University.

Session Summary:

The Expert Lecture on “Generator Protection” was organized by Faculty of Electrical Engineering. The session commenced with welcome speech addressed to the audience by **Prof.Urvi Jariwala**.

Prof.Urvi Jariwala gave a brief introduction of **Dr. Vijay makwana** and **Prof.Shabbir Bohra** felicitated him with flowers as a token of love and affection.

Dr. V.H.Makwana explained Basics of large generator design in detail. He explains Class-A, Class-B and Class-C Protection of Generator. He taken Practical Example of Vanakbori power station data and explain all the ratings of the vanakbori Station generator in detail. He also told some major facts about large generator design to students which were not there in their daily study. Professor than explain different protections in details, started with 100% stator protection than rotor protection. After these he took abnormal conditions of generator which leads to major faults. He then explains the protections against field failure.

He discuss the out of step protection of generator in detail and also covered the problem with out of step protection which will leads to think the students about generator protection more and more. He answered the doubt of students very well and asks the questions to students which lead student to imagine the situation.

Lastly he explains the equal area criterion for out of step protection and give example of how the protection works.

The talk session by Dr. Vijay Makwana proved to be very informative and beneficial to 3rd and 4th year students. Excellent coverage of topic with correlation of field interpretation by Dr. Vijay proved to be very interesting to students.

Prof Sidhhi Patel concluded the session by vote of thanks on behalf of Faculty of Electrical Engineering.

This is how one more successful event has been credited to the Faculty of Electrical Engineering.

Glimpses of the Event:



“Teaching is a very noble profession that shapes the character, caliber, and future of an individual. If the people remember me as a good teacher that will be the biggest honour for me. ”

- A. P. J. Abdul Kalam



Coordinate by:

Prof. Jignesh P Desai