



# INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500043, Telangana

## ELECTRICAL POWER SYSTEMS

### ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

Name of the faculty:	Dr. SHAIK RUKSANA BEGAM	Department:	Electrical Power Systems
Regulation:	IARE - PG21	Batch:	2022-2024
Course Name:	Modern Power System Analysis	Course Code:	BPSC01
Semester:	I	Target Value:	60% (1.8)

#### Attainment of COs:

Course Outcome		Direct Attainment	Indirect Attainment	Overall Attainment	Observation
CO1	Demonstrate the basic components of power system using the single line diagram, per unit and per phase method for understanding the restructuring of system	3.00	1.60	2.7	Attained
CO2	Utilize the representation of power system components and power flow analysis to determine the bus impedance and admittance matrices for power system	1.60	1.70	1.6	Not Attained
CO3	Examine the optimal power flow solution using FACTS devices to solve power flow analysis problems using various methods.	3.00	1.80	2.8	Attained
CO4	Make use of the symmetrical component theory to calculate the electrical parameters under symmetrical fault conditions.	3.00	1.60	2.7	Attained
CO5	Analyse the new bus voltages contingency by adding/removal of lines for illustrating the various techniques for contingency evaluation and analysis.	1.60	2.00	1.7	Not Attained
CO6	Apply the various algorithms for state estimation to estimate different components and states of power systems.	3.00	1.70	2.7	Attained

#### Action Taken Report: (To be filled by the concerned faculty / course coordinator)

CO2: More analysis has been done on operating conditions (e.g., voltage stability, load balancing, or fault isolation), the bus impedance matrix (Z-bus) and bus admittance matrix (Y-bus) and load flow analysis.

CO5: Contingency analysis has been done to evaluate the power system's ability to operate reliably under disturbances, such as the addition or removal of transmission lines

Course Coordinator

Mentor

Head of the Department