



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500043, Telangana

ELECTRICAL AND ELECTRONICS ENGINEERING ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

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|----------------------|------------------------------------|---------------|--|
| Name of the faculty: | Mr. G VISWANATH | Department: | Electrical and Electronics Engineering |
| Regulation: | IARE - UG20 | Batch: | 2021-2025 |
| Course Name: | Power System Operation and Control | Course Code: | AEEC35 |
| Semester: | VII | Target Value: | 60% (1.8) |

Attainment of COs:

| | Course Outcome | Direct Attainment | Indirect Attainment | Overall Attainment | Observation |
|-----|---|-------------------|---------------------|--------------------|--------------|
| CO1 | Solve the optimum load scheduling with various constraints in Thermal and Hydro power Stations using conventional optimization techniques and general transmission line loss formula | 0.90 | 2.30 | 1.2 | Not Attained |
| CO2 | Develop the mathematical models of the mechanical and electrical components in the power generation for deriving the transfer function of the power system | 0.30 | 2.30 | 0.7 | Not Attained |
| CO3 | Distinguish single area and two area load frequency control for minimizing the transient and steady state deviations using various controllers | 0.60 | 2.30 | 0.9 | Not Attained |
| CO4 | Choose different types of compensating equipment for controlling voltage, reactive power and power factor for improving the reliability in compensated and uncompensated transmission lines | 0.60 | 2.30 | 0.9 | Not Attained |
| CO5 | Interpret the types of loads in the power systems from their characteristic factors | 0.60 | 2.30 | 0.9 | Not Attained |
| CO6 | Design to improve the power factor of specified loads | 1.30 | 0.00 | 1 | Not Attained |

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

CO1: Solve various problems and different cases for Hydro and Thermal power stations. Try Optimization techniques for all cases.

CO2: Expose text book concepts to real world cases by arranging Industrial Visits.

CO3: Study and Practice more problems in the Load Frequency Control for Steady State and Transient Analysis.

CO4: Selecting a real example of Power factor improvement and energy consumption and observe the difference to understand concepts.

CO5: Observe how energy consumption varies with respect to loads in different cases.

CO6: Discuss the energy consumption before and after power factor improvement

Course Coordinator

Mentor

Head of the Department

Head of the Department
Electrical and Electronics Engineering
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