

Design Projects Suggested by Industries For Electrical Engineering

DIL (51)/

Dated: October 13th, 2016

S. No.	Title of Projects	Name of Industries
1.	<p><u>TITLE:-</u></p> <p>Mathematical Modeling of Electrical Power Control System of Nuclear Power Plant and Replacement of Excitation System using Nonlinear Control Technique.</p> <p><u>EXPLANATION</u></p> <p><u>Problem Statement:-</u></p> <p>In nuclear power plant the excitation system is generally compensator based. Therefore, in order to cater the nonlinearities of grid load variation and internal dynamics of synchronous generator, a nonlinear controller would be required to test performance of electrical power control system.</p> <p><u>Challenges:-</u></p> <p>Some Key challenges are detailed modeling of electrical power system, selection of nonlinear control technique for excitation system replacement like Neutral Networks or Fuzzy Logic, Selection of Design tool like MATLAB or LabVIEW, validation of results with Nuclear power plant Benchmark problem.</p> <p><u>Funding Issues: -</u></p> <p>No funding issue. Students may use NED UET high speed computation facility for this purpose.</p>	<p>Name: Dr. Arshad Habib Malik Designation: Principal Engineer Karachi Institute of Power Engineering (KINPOE) KNPC</p> <p>Tel # (Cell): 0323-2408806 Tel #(PTCL): 021-99202222,Ext:2705 Fax No: 021-99232269 E-mail:-arshad.habib@paec.gov.pk Address: KINPOE, P.O. Box No.3183, Paradise Point, Hawks bay Road,Karachi-75400.</p> <p>These Students are already selected by (KINPOE).</p> <p>1.Syed Abdullah Hashmi 2.Syed Arhamuddin 3.Muzammil Akhtar 4.Rao Mudassir Akhtar</p>

- **CED**
- **B.E Advisor (Final Year Projects)**



Ali Zulqarnain
Ag. Director Industrial Liaison