

COMPETENCY-BASED TRAINING IN ELECTRICAL DESIGN and SIMULATION ANALYSIS (EDSA)

At the end of the session, the participants will be able to:

- Enumerate the fundamental, principles of the software EDSA Paladin structure and features
- Identify the methodologies and its software base programs and its importance to the power system
- Organize a project and project files
- Create and understand Power flow studies: scope, methods, input data, output report, organize a power flow report and connect the report to the EDSA project
- Solve Short circuit studies: scope, methods, input data, output report, organize short circuit report and connecting the report to the EDSA project
- Understand PDC studies: scope, protection principles, protection coordination, data base, generate a PDC data base, input data, output report, organizing a PDC report and connecting the report and PDC curves to the EDSA project
- Understand Power Quality Investigation
- Understand Power Factor studies and improvement
- Understand Impact of capacitor bank to the system
- Understand Bus frequency response (before and after connecting the capacitor bank)

PAMAV PAMAV TRAINING INSTITUTE & TECHNOLOGY CENTER



7F, Integrated Professional Offices,
#14 Quezon Ave. Quezon City, MM, 1113
Tel. Nos. 632 7433691 to 94, 632 7422637
Fax Nos. 7407602, 7325464
Email: contact@pamavtech.com
Website: www.pamavtech.com

COMPETENCY-BASED TRAINING IN ELECTRICAL DESIGN and SIMULATION ANALYSIS

- Introduction / Methodology of EDSA
- Refresher (basics) in manual fault calculations
- EDSA Sequence of operation
- Data and analysis results
- Various hands-on exercises and case studies
- Assessments by examination

July 21, 22, 23, 2010

August 11, 12, 13, 2010

September 22, 23, 24, 2010

October 13, 14, 15, 2010

November 17, 18, 19, 2010

COMPETENCY-BASED TRAINING IN ELECTRICAL DESIGN and SIMULATION ANALYSIS (EDSA)

COURSE BACKGROUND:

The EPIRA law mandates reliability, efficiency and practically zero downtime in substation apparatus operation. Technical services group, power system maintenance team and facilities maintenance engineers are the front liners in ensuring the asset longevity operation and recovery of investments.

The unpredictability of operation lies in the way substation assets are maintained and this technical training will guide experienced power transformer maintenance engineer improve his knowledge based on international standards.

COURSE HIGHLIGHTS:

- Introduction/ Methodology of EDSA
- Sequence of operation
- Device Library Database
- Detailed Modeling
- Annotating Equipment
- Data and Analysis Results

WHO SHOULD ATTEND?

- Design Engineers
- Project / Construction Engineer
- Utility / Maintenance Engineer
- Electrical Engineer Graduates
- PEE

At the end of the session, the participants will receive:

- Certificate of Completion
- Continuing Professional Education points (as required by PRC and IIEE)
- Recommendation of Competency (upon completion of Supervisor evaluation)

COURSE FEE:

PhP 12,800.00 inclusive of snacks, lunch, Certificate of Completion
A processing fee of PhP 500.00 will be charged CPE points accreditation

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COURSE OUTLINE

DAY 1

Fundamentals

- Per unit analysis principle
- Symmetrical components
- Negative sequence calculations
- Maintenance protocol

DAY 2

EDSA Software Basics and Hands-On

- Catalog management
- Single line diagram set-up
- Defining scenarios
- Project Management
- Multiple page and drawings management
- Electrical interconnection
- Back annotation and hyper linking
- Symbol property menu
- Hands-on exercise

DAY 3

EDSA Software and Hands-On

- Hands-on exercises
- Advanced load flow analysis
- Under load tap chargers
- Local and remote voltage control using ULTC's and SVC's
- Simultaneous load flow and dynamic motor starting
- Simultaneous motor starting analysis
- Managing protective device coordination database
- Protective device coordination analysis
- Injection of fault currents and tripping time evaluation
- Customizing the time current coordination graph

Engr. Ulysses B. Paguio, PEE

Engr. Paguio is a Training Consultant of . Engr. Paguio's expertise comes from years of experience as a Power Systems and Testing Engineer in the Middle East and the Philippines servicing companies such as: Siemens, ABB Industry, Inc., and Manila Electric Company to name a few. He is also a Professor of the Electrical Engineering department at the Mapua Institute of Technology in the Philippines teaching. Engr. Paguio's expertise is on the aspects of Power System Engineering and Testing. He graduated Bachelor of Science in Electrical Engineering and is currently continuing his Master of Science in Technological University of the Philippines.

Engr. Eduardo M. Pabuna Jr. REE

Engr. Pabuna specializes in substation testing and has handled transformer maintenance for various clients such as: Clark, National Transmission Corp, San Miguel, Mactan Airport, Wyeth Philippines and Steel Asia to name a few. His expertise comes from preparing, execution and analysis of the insulation power factor test procedure. Engr. Pabuna has attended various seminars on the aspects of Power Circuit Breaker Testing, EDSA Power Sytem Design Analysis and Simulation in San Diego, California and has been a key note speaker on the subjects of Testing and Commissioning of Intelligent Diagnostic Device at ABB in Thailand and conference on Electrical Design and Maintenance organized by the Integrated Institute of Electrical Engineers (IIEE).

REGISTRATION

Hands On, Competency Based Training In ELECTRICAL DESIGN AND SIMULATION ANALYSIS (EDSA)

Please check the date:

- Date:**
- July 21 to 23, 2010
 - August 11 to 13, 2010
 - September 22 to 24, 2010
 - October 13 to 15, 2010
 - November 17 to 19, 2010

Venue: PAMAVTECH, 7F Integrated Professional Office Building
14 Quezon Avenue Quezon City

Time: 8:00 am to 5:00 pm on each day

Please fill up and return to fax 740-7602 or admin@pamavtech.com. Provide one form for each participant.

| | |
|---|--------------|
| NAME (as you want to appear on certificate. Title, first name, middle initial, last name, suffix) | |
| DESIGNATION | |
| COMPANY NAME | |
| TELEPHONE | LOCAL NUMBER |
| CELLPHONE | |
| EMAIL ADDRESS | |

Payment:

Reservations without payment do not confirm your slot. To confirm your reservation, please pay the course fee of Php 12,800.00 per person thru China Bank (Quezon Avenue branch) Account name PAMAV Training Institute & Technology Center, C/A#: 107-119555-8. Please attach the deposit slip with this form.