

POWER SYSTEM MODELLING & FAULT ANALYSIS

For Professional Electrical Engineer Applicants

**LEARN FROM A SEASONED & RENOWNED EXPERT IN THE FIELD
OF ELECTRICAL ENGINEERING & DISTRIBUTION UTILITY**



COURSE DESCRIPTION

This 24-hour course provides an in-depth study of Power System Modeling and Short Circuit Calculations. This will include discussions on per-unit calculations, detailed modeling of power system components, symmetrical components, short circuit analysis, etc. A must for Power System Engineers, Design Engineers, and Protection Engineers in order to ensure a reliable and stable network, especially in the age of distributed generation, as well as future PEE applicants for their proper guidance in the preparation of Technical Engineering Reports.

PROGRAM OBJECTIVES

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

- Compute for system parameters using per unit and symmetrical components methodology
- Determine the different sequence network models of different power system components and types of faults
- Compute the size and identify minimum specifications of circuit breakers for their proper operation during fault conditions

WHO SHOULD ATTEND?

- Power System Engineers
 - System Operations Engineers
 - Power System Protection Engineers
 - Power System Operator & Maintenance Engineers
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PROGRAM OUTLINE

4 days from March 25, April 1, 15, & 29, 2023

8:00 am to 5:00 pm

Online Classes via Zoom

Module 1: Overview and Fundamentals

- Quick overview of short-circuit currents
- Power system modelling
- Per unit calculations
- Symmetrical components

Module 2: Faults, Short Circuits & Sequence Networks

- Types and causes of faults
- Consequences of faults
- Application of fault analysis
- Classification of short circuits
- Sequence networks & models

Module 3: Shunt and Series Fault Calculations, Voltage Rise, and Circuit Breaker Sizing

- Derivation of sequence network
- Interconnections
- Assumptions & procedures in short circuit calculations
- Fault MVA
- Voltage rise phenomenon
- Circuit breaker sizing

Module 4: Arc Flash Calculations

ABOUT THE EXPERT SPEAKER



A seasoned power system technical and management professional, Engr. Atoy Leynes is a Professional Electrical Engineer, ASEAN Chartered Professional Engineer, APEC Engineer, and a graduate of the Power System Engineering Course of General Electric in New York and MERALCO.

Apart from this, he is an Independent Director of the Philippine Electricity Market Corporation. He is a former Senior VP and COO of Clark Electric Distribution Corporation, Managing Director and CEO of Ibadan Electricity Distribution Company in Nigeria, VP of Meralco, and Chairman of the PRC-Electrical Engineering Board.

EVALUATION REMARKS OF PREVIOUS PARTICIPANTS TO THE SPEAKER

As stated in the evaluation sheet

"Very accommodating at entertaining questions, very energetic and Sir Atoy is very knowledgeable."

"He knows what he is teaching and has wide knowledge regarding the topic. He is accommodating too to every question asked by the participant"

"Very precise, even derivation of formulas was explained. I'm grateful for the technical he presented."

"The training gave me more information and knowledge about transformers, their connection, and how it actually works."

Highly recommended by power industry professionals.

LEARNING INVESTMENT

Enroll and learn about basic & advance power system modelling techniques from the industry renowned expert!

16,000

Standard rate

14,400

Special rate
for group of 3+

To enroll, please click this [link](#).

After sending your enrollment request, please expect a reply from us within 24 hours containing the payment process and other reminders.

If you want an **in-house batch** for your group, you may email learn@meralcopoweracademy.org.

You may also contact us at +639989747089 if you need further assistance.
