

COURSE OVERVIEW EE0643
Responsible Electrical Person

Course Title

Responsible Electrical Person

Course Date/Venue

January 19-23, 2025/TBA Meeting Room, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE

Course Reference

EE0643

Course Duration/Credits

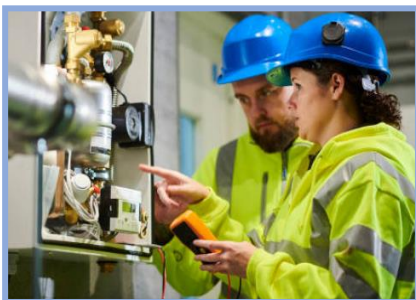
Five days/3.0 CEUs/30 PDHs



Course Description



This practical and highly-interactive course includes various practical sessions and exercises. Theory learnt will be applied using our state-of-the-art electrical troubleshooting simulator.



This course is designed to provide participants with a detailed and up-to-date overview of Responsible Electrical Person Program. It covers the role and responsibilities of the responsible electrical person in accordance with the international standards and guidelines; the human factors and proper communication, situation awareness and decision making; the construction of switchgear and circuit breaker; the essential information required for operation and maintenance staff to enable them to perform their job safely and in a professional way as per the approved standards; and the breaker types, switchgear rating and operation.



During this interactive course, participants will learn the principles of safety rules and minimizing the risks; the safe testing and maintenance of breakers and switchgear; the control and management of distribution systems; the construction of circuit breaker types; the switchgear interlocking's and avoiding common mistakes during equipment maintenance; the short circuit calculation and PPE; designing switching programmes and simulator exercises; the problems with ageing switchgear outdated mechanisms; the leadership, teamwork and stress management; the power generation, distribution, UPS and DC system, generators excitation and CT, VT and protection relays; the testing and troubleshooting of protection system in a professional manner; and the importance of power quality issue.

Course Objectives

Upon the successful completion of this course, each participant will be able to:-

- Get certified as a “*Certified Responsible Electrical Person (REP)*”
- Comprehend the role and responsibilities of the responsible electrical person in accordance with the international standards and guidelines
- Explain human factors and employ proper communication, situation awareness and decision making
- Describe the construction of switchgear and circuit breaker and the essential information required for operation and maintenance staff to enable them to perform their job safely and in a professional way as per the approved standards
- Recognize breaker types including switchgear rating and operation
- Discuss the principles of safety rules and minimize the risks
- Illustrate safe testing and maintenance of breakers and switchgear
- Apply control and management of distribution systems including the construction of circuit breaker types
- Carryout switchgear interlocking's and avoid common mistakes during equipment maintenance
- Employ short circuit calculation and PPE as well as design switching programmes
- Demonstrate simulator exercises and discuss problems with ageing switchgear outdated mechanisms
- Develop leadership and teamwork as well as stress management
- Recognize power generation, distribution, UPS and DC system, generators excitation and CT, VT and protection relays
- Test and troubleshoot protection system in a professional manner and discuss the importance of power quality issue

Exclusive Smart Training Kit - H-STK®



Participants of this course will receive the exclusive “Haward Smart Training Kit” (H-STK®). The H-STK® consists of a comprehensive set of technical content which includes **electronic version** of the course materials conveniently saved in a **Tablet PC**.

Who Should Attend

This course provides an overview of all significant aspects and considerations of Responsible Electrical Persons (REP) for electrical personnel who are preparing to take on the role of responsible electrical person on an offshore or onshore installation.

Course Fee

US\$ 5,500 per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Certificate(s)

- (1) Internationally recognized Wall Competency Certificates and Plastic Wallet Card Certificates will be issued to participants who completed a minimum of 80% of the total tuition hours and successfully passed the exam at the end of the course. Successful candidate will be certified as a “Responsible Electrical Person”. Certificates are valid for 5 years.

Sample of Certificates

The following are samples of the certificates that will be awarded to course participants:-



- (2) Official Transcript of Records will be provided to the successful delegates with the equivalent number of ANSI/IACET accredited Continuing Education Units (CEUs) earned during the course.

* Haward Technology * CEUs * Haward Technology * CEUs * Haward Technology * CEUs * Haward Technology *



Haward Technology Middle East
Continuing Professional Development (HTME-CPD)

CEUs
Page 1 of 1

CEU Official Transcript of Records

TOR Issuance Date: 21-Aug-19

HTME No. PAR182288

Participant Name: Kafil Al Qattan

Program Ref.	Program Title	Program Date	No. of Contact Hours	CEU's
EE0643	Responsible Electrical Persons	August 15 - 21, 2019	30	3.0

Total No. of CEU's Earned as of TOR Issuance Date 3.0

TRUE COPY



Maricel De Guzman
Academic Director

Haward Technology has been approved as an Authorized Provider by the International Association for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this approval, Haward Technology has demonstrated that it complies with the ANSI/IACET 1-2013 Standard which is widely recognized as the standard of good practice internationally. As a result of their Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for programs that qualify under the ANSI/IACET 1-2013 Standard.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking Continuing Education Units (CEUs) in accordance with the rules & regulations of the International Association for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology is accredited by










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Certificate Accreditations

Certificates are accredited by the following international accreditation organizations: -

- 

British Accreditation Council (BAC)

Haward Technology is accredited by the **British Accreditation Council for Independent Further and Higher Education** as an **International Centre**. BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

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The International Accreditors for Continuing Education and Training (IACET - USA)

Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

Haward Technology’s courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units (CEUs)** in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology Middle East will award **3.0 CEUs** (Continuing Education Units) or **30 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant’s involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant’s CEU and PDH Transcript of Records upon request.

Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.

Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:



Mr. Ken Steel is a **Senior Electrical & Instrumentation Engineer** with over **45 years** of extensive experience. His expertise widely covers **Electrical Motors Testing, Heat Tracing & Insulation Installation & Testing, HV Terminations, High & Low Voltages** on Overhead Cranes, **HV/MV Cable Splicing, Cable & Over Head Power Line, HV/MV Switchgear, HV Cable Design, Medium & High Voltage Equipment, High Voltage Circuit Breaker Inspection & Repair, High Voltage Power System, HV Equipment Inspection & Maintenance, HV Switchgear Operation & Maintenance, Resin / Heat Shrink & Cold Shrink Joints, HV/LV Equipment, LV & HV Electrical System, Cable Splicing & Termination, High Voltage Electrical Safety, LV, MV & HV Cable Installations & Properties, LV Substation, MV & LV Cable, UPS Systems, MV & LV Direct on Line Motor Drives, MV & LV VSD Motor Drives, MV & LV Soft Starter Motor Drives, LV Two Speed Motor Drives, Underground Transformer Oil Containment Tank, Electrical & Instrumentation Construction Installation, 1500KW, 1000KW, 1752KW Diesel Power Plant Installation, 110KV Overhead Line, 110KV Outdoor Switchgear, 110KV/10KV 6500KVA Transformer, Transformer Substation, 1600KVA 10KV/0.4KV & 2 Off 1000KVA Diesel Generators, 1600KVA 10KV/0.4KV & 1650KVA Diesel Generator, 110KV/35KV/10KV Substation, 110KV/10KV Transformers, 110KV & 2 Off 6KV Overhead Lines, 34.5KV, 13.8KV, 4.16KV & 480V Switchgear, 4.16KV & 480V MCC, Transformers & Motor Drives Substations, Diesel Driven Generators, Overhead Cranes, Overhead Cranes & HVAC Units, AC & DC Drives, Data Logger, Electrical, Instrumentation & Mechanical Installation Maintenance, Slab Mills, Pre Heat Ovens, Hydraulic Shears, Stamping Machine, Gearboxes, Rollers, Pumps, Valves, Electro Magnets & Pump House Operation, Boilers Construction And Commissioning, Valve Calibration & Testing, Level Gauges, Pressure & Flow Transmitters Installation & Calibration, Pressure & Leak Testing of Boilers, Leak Testing, SMP, Elect, I&C, F&G, HVAC & Utility Services, Nitrogen Leak Test Operations, Steam Blowing Activities, SMP, Elect, I&C, F&G, HVAC & Utility Services, PTW Issue (PA/AC), Installation & Mechanical Piping and Hydro Testing & Leak Testing of Lines Installation.**

During Mr. Steel's career life, he has gained his practical experience through several significant positions and dedication as the **3GP PBF & Boilers SC Commission Support, SC Site Execution Superintendent, E&I Construction Superintendent, High Voltage Construction Supervisor, Control & Power Construction Supervisor, Electrical & Instrumentation Supervisor, Electrical Technician, Construction Support Electrical Engineer, E&I Engineer, Electrical/Instrumentation Site Supervisor, Q.A/Q.C Inspector, Electrical/ Instrumentation Technician, Maintenance Fitter Instrumentation Technician, Millwright, Apprentice Millwright and Senior Instructor/Lecturer** for Tengiz Chevron Oil Kazakhstan, Al Jubail Saudi Arabia, Escravos Delta state Nigeria, Lurgi S.A, SuD Chemie Sasol Catalysts, J C Groenewalds Construction (LTA), Tycon (Goodyear S.A.), Dragline Construction and Iscor Vanderbijlpark.

Mr. Steel has a **Diploma in Electronics Mechanic**. Further, he is a **Certified Instructor/Trainer** and delivered numerous trainings, courses, workshops, seminars and conferences internationally.

Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

- 30% Lectures
- 20% Practical Workshops & Work Presentations
- 30% Hands-on Practical Exercises & Case Studies
- 20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the course for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1: Sunday, 19th of January 2025

0730 – 0800	<i>Registration & Coffee</i>
0800 – 0815	<i>Welcome & Introduction</i>
0815 – 0830	PRE-TEST
0830 – 0900	<i>Introduction to REP</i>
0900 - 0930	<i>Role of the REP & Human Factors</i>
0930 – 0945	<i>Break</i>
0945 – 1030	<i>Communication, Situation Awareness & Decision Making</i>
1030 – 1130	<i>Switchgear Construction</i>
1130 – 1200	<i>Circuit Breaker Types</i>
1200 – 1230	<i>Switchgear Rating & Safety Operation</i>
1230 – 1245	<i>Break</i>
1245 – 1345	<i>Principles of Safety Rules & Minimizing the Risks</i>
1345 - 1420	<i>Safe Testing & Maintenance of Breakers & Switchgear</i>
1420 – 1430	Recap
1430	<i>Lunch & End of Day One</i>

Day 2: Monday, 20th of January 2025

0730 – 0830	<i>Control & Management of Distribution Systems</i>
0830 - 0930	<i>Construction of Circuit Breaker Types</i>
0930 – 0945	<i>Break</i>
0945 – 1100	<i>Switchgear Interlocking's</i>
1100 – 1215	<i>Troubles During Equipment Maintenance</i>
1215 – 1230	<i>Break</i>
1230 – 1420	<i>Short Circuit Calculation & PPE</i>
1420 – 1430	Recap
1430	<i>Lunch & End of Day Two</i>

Day 3: Tuesday, 21st of January 2025

0730 – 0930	<i>Switching Programmes</i>
0930 – 0945	<i>Break</i>
0945 – 1100	<i>Simulator Exercises</i>
1100 – 1215	<i>Problems with Ageing Switchgear Outdated Mechanisms</i>

1215 – 1230	<i>Break</i>
1230 – 1420	<i>Leadership & Teamwork</i>
1420 – 1430	<i>Recap</i>
1430	<i>Lunch & End of Day Three</i>

Day 4: Wednesday, 22nd of January 2025

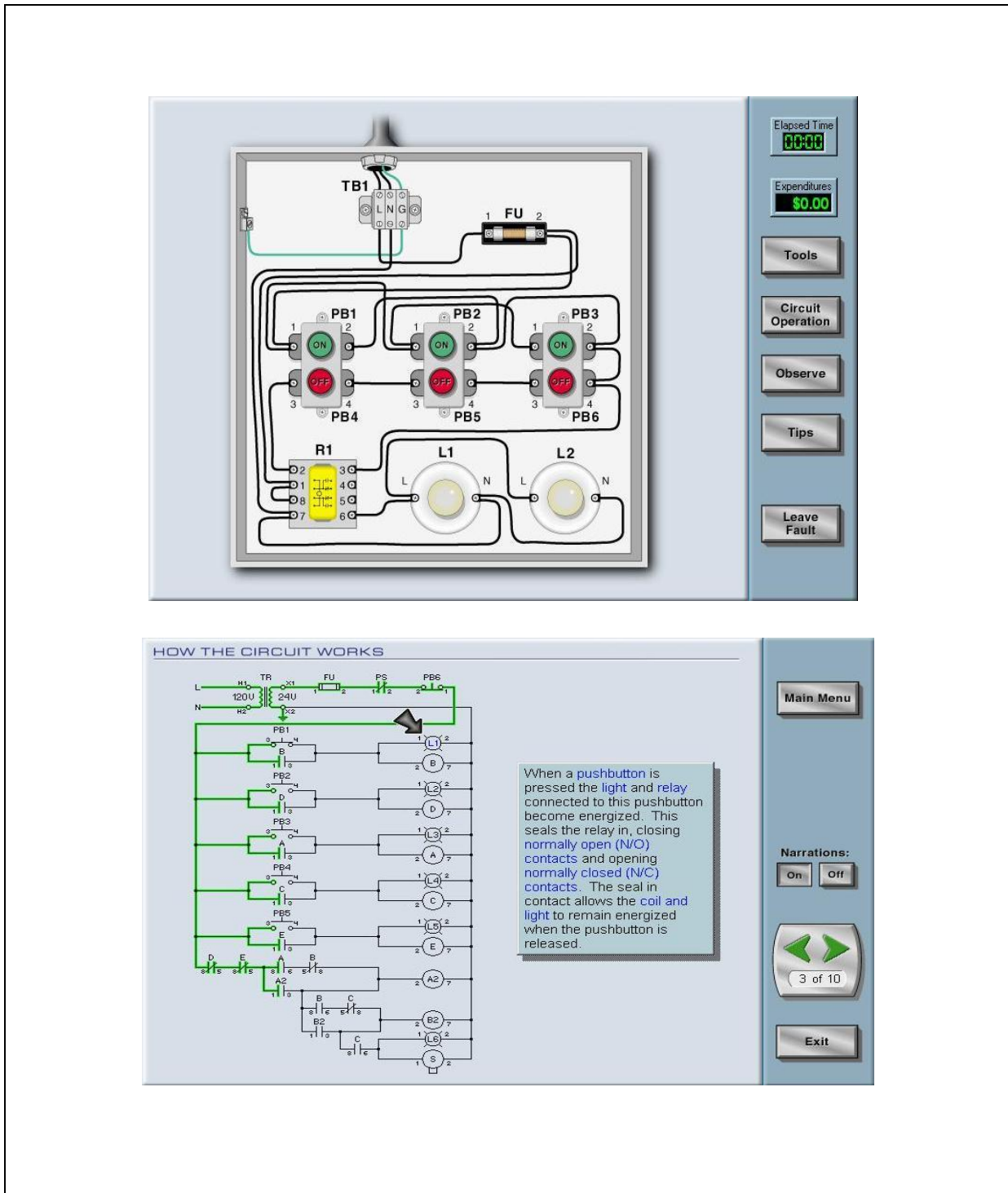
0730 – 0930	<i>Stress Management</i>
0930 – 0945	<i>Break</i>
0945 – 1100	<i>Power Generation & Distribution</i>
1100 – 1215	<i>UPS & DC System</i>
1215 – 1230	<i>Break</i>
1230 – 1420	<i>Generators Excitation</i>
1420 – 1430	<i>Recap</i>
1430	<i>Lunch & End of Day Four</i>

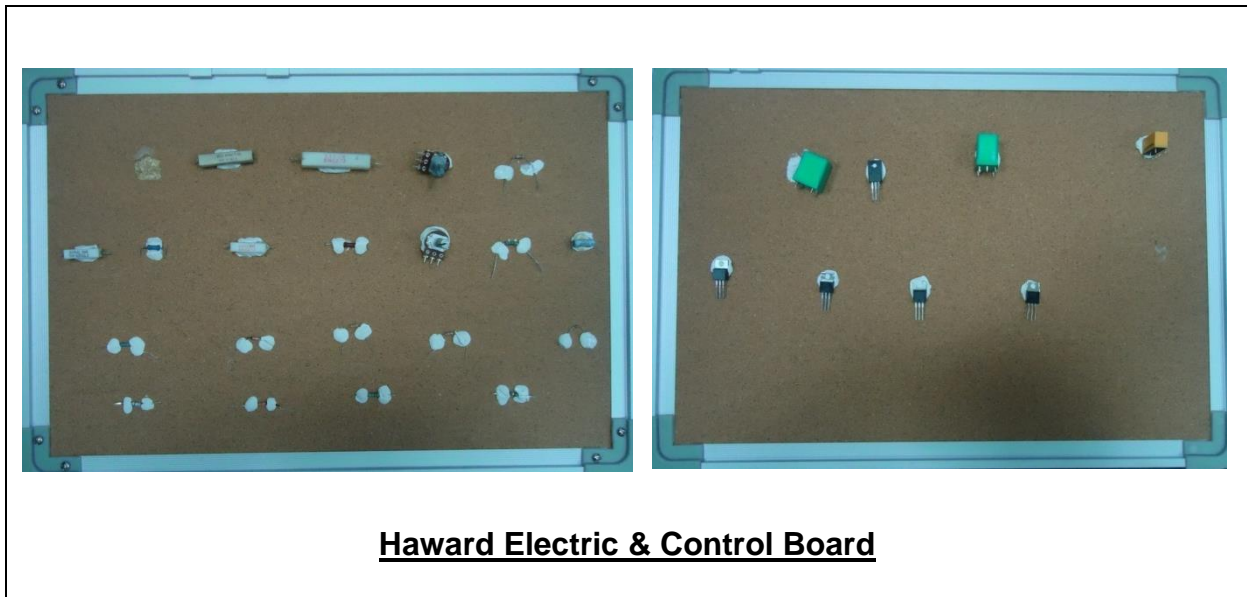
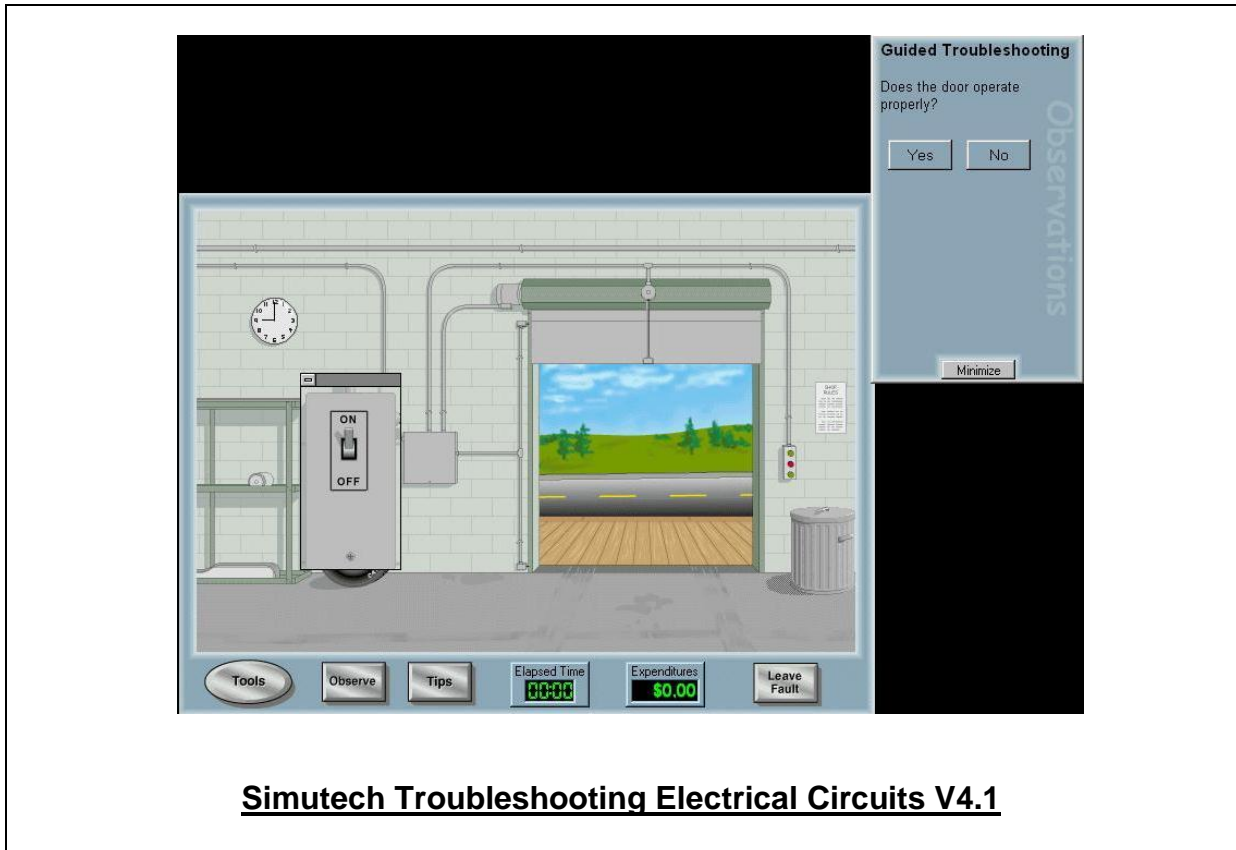
Day 5: Thursday, 23rd of January 2025

0730 – 0930	<i>CT, VT & Protection Relays</i>
0930 – 0945	<i>Break</i>
0945 – 1100	<i>Testing & Troubleshooting of Protection System</i>
1100 – 1215	<i>Testing & Troubleshooting of Protection System (cont'd)</i>
1215 – 1230	<i>Break</i>
1230 – 1300	<i>Importance of Power Quality Issue</i>
1300 – 1315	<i>Course Conclusion</i>
1315 – 1415	<i>COMPETENCY EXAM</i>
1415 – 1430	<i>Presentation of Course Certificates</i>
1430	<i>Lunch & End of Course</i>

Simulator (Hands-on Practical Sessions)

Practical sessions will be organized during the course for delegates to practice the theory learnt. Delegates will be provided with an opportunity to carryout various exercises using our state-of-the-art “Troubleshooting Electrical Circuits V4.1 Simulator”, “Simutech Troubleshooting Electrical Circuits V4.1” and “Haward Electric & Control Board” simulator.





Course Coordinator

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