COURSE OVERVIEW EE1038
Authorized Person Regularization for Medium/High Voltage Systems

Course Title
Authorized Person Regularization for Medium/High Voltage Systems



Course Date/Venue
November 15-19, 2026/TBA Meeting Room, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE

Course Reference
EE1038

Course Duration/Credits
Five days/3.0 CEUs/30 PDHs

Course Description







This practical and highly-interactive course includes various practical sessions where participants will be engaged in HV/LV power switching and other working practices.

This course is designed to provide participants with a detailed and up-to-date overview of Authorized Person Regularization for Medium/High Voltage Systems. It covers the importance of authorised person (AP) regularisation for medium voltage (MV) and high voltage (HV) electrical systems; the MV/HV electrical power system fundamentals, electrical safety legislation, standards and regulatory requirements; the electrical hazards, risk assessment and safe working practices; the electrical safety rules, authorisation procedures, MV/HV installations and safety compliance; the MV/HV switchgear and electrical equipment operation; and the MV/HV switching principles and operational planning.

Further, the course will also discuss the safe switching procedures and operational communication; the electrical isolation, lockout/tagout and prevention of re-energisation; the proving dead, earthing and short-circuiting procedures and practical switching and isolation simulation; establishing electrical permit-to-work (PTW) systems and documentation and safe systems of work and worksite control; the MV/HV electrical maintenance and inspection safety; the electrical protection systems, fault management, electrical testing, commissioning and safety precautions; and the advanced MV/HV operational risk management, substation safety and control of electrical access.

During this interactive course, participants will learn the electrical emergencies, incident response and rescue procedures; the electrical fault response and emergency switching; the system restoration, re-energisation and return-to-service procedures; the practical emergency response and operational decision-making; the authorised person competency requirements, regularisation criteria, electrical safety rules and operational compliance; the MV/HV switching and isolation competency assessment, permit-to-work and operational responsibility assessment; and the integrated MV/HV operational scenario and practical.

Course Objectives/Outcomes & Benefits for the Participants

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

- Apply and gain an in-depth knowledge on authorized person regularization for medium/high voltage systems
- Discuss the importance of authorised person (AP) regularisation for medium voltage (MV) and high voltage (HV) electrical systems
- Explain MV/HV electrical power system fundamentals including electrical safety legislation, standards and regulatory requirements
- Apply electrical hazards, risk assessment and safe working practices, electrical safety rules and authorisation procedures and MV/HV installations and safety compliance
- Carryout MV/HV switchgear and electrical equipment operation, MV/HV switching principles and operational planning
- Employ safe switching procedures and operational communication including electrical isolation, lockout/tagout and prevention of re-energisation
- Apply proving dead, earthing and short-circuiting procedures and practical switching and isolation simulation
- Establish electrical permit-to-work (PTW) systems and documentation as well as safe systems of work and worksite control
- Apply MV/HV electrical maintenance and inspection safety, electrical protection systems, fault management, electrical testing, commissioning and safety precautions
- Carryout advanced MV/HV operational risk management including substation safety and control of electrical access
- Implement electrical emergencies, incident response and rescue procedures as well as electrical fault response and emergency switching
- Employ system restoration, re-energisation and return-to-service procedures and practical emergency response and operational decision-making
- Apply authorised person competency requirements, regularisation criteria, electrical safety rules and operational compliance
- Apply MV/HV switching and isolation competency assessment, permit-to-work and operational responsibility assessment and integrated MV/HV operational scenario and practical

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 authorized person regularization for medium/high voltage systems for electrical engineers, electrical supervisors, team leaders, electrical maintenance engineers and technicians, electrical operations and switching personnel, substation engineers and other technical staff.

Training Methodology

Our courses employ an interactive, learner-centred methodology that integrates theoretical knowledge with practical application. The training is delivered through a suitable combination of some or all of the following methods, selected according to the course content and learning objectives:

- Instructor-led presentations and facilitated discussions
- Practical workshops and participant presentations
- Hands-on exercises and real-world case studies
- Equipment demonstrations and technical drawings
- Hardware- and software-based simulations
- Gamification & Role Play in soft-skills courses only
- Virtual Reality (VR) and Augmented Reality (AR)
- Instructional videos and other relevant training resources

This blended approach encourages active participation, strengthens practical skills and supports the effective application of acquired knowledge in the workplace.

Learning Design & Customization

This course can be customized to the exact requirements of clients. Haward Technology is so proud of our huge capabilities in tailoring our courses to the training needs of our valued clients.

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 Competency Certificates and Plastic Wallet Cards 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. Certificates are valid for 5 years.

Recertification is FOC for a Lifetime.

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 Middle East

Continuing Professional Development (HTME-CPD)

CEU Official Transcript of Records

TOR Issuance Date: 14-Nov-25

HTME No. 74851

Participant Name: Waleed Al Habeeb

Program Ref.	Program Title	Program Date	No. of Contact Hours	CEU's
EE1038	Authorized Person Regularization for Medium/High Voltage Systems	Nov 10-14, 2025	30	3.0

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

TRUE COPY

Jaryl Castillo
Academic Director

Haward Technology has been approved as an Accredited 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 1-2018 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 1-2018 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

P.O. Box 26070, Abu Dhabi, United Arab Emirates | Tel.: +971 2 3091 714 | E-mail: info@haward.org | Website: www.haward.org

Certificate Accreditations

Haward's 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**. Haward's certificates are internationally recognized and accredited by the British Accreditation Council (BAC). 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.

- 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.

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:



Dr. Ahmed El-Sayed, PhD, MSc, BSc, is a **Senior Electrical & Instrumentation Engineer** with over **30 years** of extensive experience in the **Power**, **Petroleum**, **Petrochemical** and **Utilities**. He specializes in **HV/LV Equipment**, **High Voltage Electrical Safety**, **LV & HV Electrical System**, **HV Equipment's Inspection & Maintenance**, **HV Switchgear Operation & Maintenance**, **LV Distribution Switchgear & Equipment**, **HV Switchgear Maintenance**, **HV/LV Electrical** Authorisation, **Hazardous Area Classification, Power Quality**, **Disturbance Analysis**, **Blackout**, **Power Network**, **Power Distribution**, **Power Systems Control**, **Power Systems Security**, Power **Electronics**, **ETAP**, Electrical **Substations**, Tariff Design & Structure Analysis, **Engineering Drawings, Codes & Standards**, **P&ID Reading, Interpretation & Developing**, **PLC**, **SCADA**, **DCS**, **Process Control**, **Instrumentation**, **Automation**, Power **Generation**, **Process Control Instrumentation**, **SIS**, **SIL**, **ESD**, **Alarm Management Systems**, **Fieldbus Systems** and **Fiber Optics** as well as the service pricing of these. He is currently the **Systems Control Manager** of **Siemens** where he is in-charge of Security & Control of Power **Transmission Distribution** & **High Voltage** Systems and he further takes part in the Load Records Evaluation & Transmission Services Pricing.

During his career life, Dr. Ahmed has been actively involved in different Power System Activities including Roles in Power System Planning, Analysis, Engineering, **HV Substation** Design, Electrical Service Pricing, Evaluations & Tariffs, Project Management and also in Teaching and Consulting. His vast industrial experience was honed greatly when he joined many International and National Companies such as **Siemens**, **Electricity Authority** and **ACETO** industries where he focused more on dealing with Technology Transfer, System Integration Process and Improving Localization. He was further greatly involved in manufacturing some of **Power System** and **Control & Instrumentation Components** such as Series of Digital Protection **Relays**, MV **VFD**, **PLC** and **SCADA** System with intelligent features.

Dr. Ahmed is well-versed in different electrical and instrumentation fields like Load Management Concepts, **PLC** Programming, Installation, Operation and Troubleshooting, **AC Drives** Theory, Application and Troubleshooting, Industrial Power Systems Analysis, AC & DC **Motors**, Electric Motor **Protection**, **DCS SCADA**, **Control** and Maintenance Techniques, Industrial Intelligent Control System, **Power Quality** Standards, Power Generators and Voltage Regulators, Circuit Breaker and Switchgear Application and Testing Techniques, **Transformer** and **Switchgear** Application, Grounding for Industrial and Commercial Assets, Power Quality and **Harmonics**, **Protective Relays** (O/C Protection, Line Differential, Bus Bar Protection and **Breaker Failure Relay**) and Project Management Basics (PMB).

Dr. Ahmed has **PhD**, **Master's** & **Bachelor's** degree in **Electrical** and **Instrumentation Engineering** from the **University of Wisconsin Madison**, **USA**. Further, he has numerous papers published internationally in the areas of Power Quality, Superconductive Magnetic Energy Storage, SMES role in Power Systems, Power System **Blackout** Analysis, and Intelligent Load Shedding Techniques for preventing Power System Blackouts, HV **Substation Automation** and Power System Stability.

Accommodation

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

Course Program

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

Day 1: ***Sunday, 15th of November 2026***

0730 – 0800	*Registration & Coffee*
0800 – 0815	*Welcome & Introduction*
0815 – 0830	***PRE-TEST***
0830 – 0930	***Introduction to Authorised Person Regularisation & Electrical Safety Management*** *Understanding the Purpose, Scope & Importance of Authorised Person (AP) Regularisation for Medium Voltage (MV) & High Voltage (HV) Electrical Systems • Reviewing the Roles, Responsibilities, Authority Limits & Accountability of Authorised Persons Within Electrical Safety Management Systems • Differentiating Between Authorised Persons, Competent Persons, Senior Authorised Persons & Other Electrical Duty Holders • Understanding Regularisation, Competency Reassessment, Reauthorisation & Continued Compliance with Organisational Electrical Safety Rules*
0930 – 0945	*Break*
0945 – 1030	***MV/HV Electrical Power System Fundamentals*** *Reviewing the Principles of Electrical Power Generation, Transmission, Distribution & Utilisation Within Industrial & Utility Networks • Understanding MV/HV Voltage Classifications, Electrical Network Configurations, Operating Characteristics & System Limitations • Identifying Major Electrical System Components, Including Transformers, Switchgear, Circuit Breakers, Disconnectors, Busbars & Protection Equipment • Interpreting Electrical Single-Line Diagrams, Network Layouts, Equipment Identification Systems & Electrical Operating Boundaries*
1030 – 1130	***Electrical Safety Legislation, Standards & Regulatory Requirements*** *Reviewing Applicable National Electrical Safety Legislation, Regulatory Requirements & Organisational Electrical Safety Procedures • Understanding Relevant Requirements of IEC 50110-1, EN 50110-1, NFPA 70E & Other Applicable Electrical Safety Standards • Examining the Relationship Between Electrical Safety Rules, Approved Operating Procedures, Manufacturer Instructions & Site-Specific Requirements • Identifying the Responsibilities of Employers, Authorised Persons, Electrical Supervisors & Contractors in Maintaining Regulatory Compliance*
1130 – 1215	***Electrical Hazards, Risk Assessment & Safe Working Practices*** *Identifying Electrical Hazards Associated with Electric Shock, Arc Flash, Arc Blast, Induced Voltages, Stored Energy & Equipment Failure • Applying Hazard Identification, Risk Assessment, Job Safety Analysis & Hierarchy of Control Principles to MV/HV Activities • Evaluating Approach Boundaries, Electrical Clearances, Restricted Access Requirements & Safe Working Distances • Selecting Appropriate Personal Protective Equipment, Insulated Tools, Voltage-Rated Equipment & Electrical Protective Devices*
1215 – 1230	*Break*

1230 – 1330	***Electrical Safety Rules & Authorisation Procedures*** *Reviewing Electrical Safety Rules Governing Access, Operation, Isolation, Maintenance & Testing of MV/HV Installations • Understanding the Requirements for Appointment, Competency Assessment, Authorisation Renewal & Suspension of Electrical Authorisations • Defining the Limitations of Authority, Operational Responsibilities, Delegation Arrangements & Escalation Requirements • Applying Safe Systems of Work, Operational Discipline, Communication Protocols & Supervision Requirements*
1330 – 1420	***Practical Review of MV/HV Installations & Safety Compliance*** *Identifying MV/HV Equipment, Warning Signs, Safety Barriers, Access Restrictions & Equipment Identification Markings • Reviewing Typical Substation Layouts, Electrical Distribution Arrangements, Switchgear Compartments & Transformer Installations • Conducting a Simulated Electrical Hazard Identification Exercise Using Representative MV/HV Installation Scenarios • Evaluating Existing Electrical Safety Arrangements Through Practical Case Studies, Group Discussions & Competency Review Exercises*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day One*

Day 2: ***Monday, 16th of November 2026***

0730 – 0830	***MV/HV Switchgear & Electrical Equipment Operation*** *Reviewing the Construction, Operating Principles & Applications of Air-Insulated, Gas-Insulated & Vacuum Switchgear • Understanding the Operating Characteristics of Circuit Breakers, Disconnectors, Earthing Switches, Contactors & Associated Control Systems • Examining Electrical & Mechanical Interlocking Arrangements, Safety Interlocks, Equipment Status Indicators & Operational Safeguards • Identifying Equipment Operating Limitations, Abnormal Conditions, Common Defects & Manufacturer-Specific Safety Requirements*
0830 – 0930	***MV/HV Switching Principles & Operational Planning*** *Understanding the Principles of Electrical Switching, Load Transfer, Network Reconfiguration & Controlled System Operation • Developing Switching Programmes Based on Approved Single-Line Diagrams, Operational Requirements & System Operating Conditions • Reviewing Switching Sequences, Equipment Identification, Switching Responsibilities & Independent Verification Requirements • Assessing Operational Risks Associated with Incorrect Switching, Unexpected Energisation, Equipment Failure & Network Instability*
0930 – 0945	*Break*
0945 – 1100	***Safe Switching Procedures & Operational Communication*** *Applying Approved Switching Instructions, Operational Checklists, Control-Room Coordination & Communication Protocols • Understanding the Requirements for Switching Authorisation, Operational Consent, Switching Records & Confirmation of Equipment Status • Performing Simulated Switching Sequences Involving Circuit Breakers, Disconnectors, Earthing Switches & Transformer Feeders • Recognising Switching Errors, Procedural Deviations, Abnormal Equipment Responses & Conditions Requiring Immediate Suspension of Operations*

1100 – 1215	***Electrical Isolation, Lockout/Tagout & Prevention of Re-Energisation*** *Understanding the Principles of Secure Electrical Isolation, Energy Control & Prevention of Accidental or Unauthorised Re-Energisation • Identifying Suitable Isolation Points, Alternative Power Sources, Backfeeds, Stored Energy Sources & Interconnected Electrical Supplies • Applying Approved Lockout/Tagout Procedures, Isolation Registers, Locking Arrangements & Safety Warning Notices • Verifying Isolation Effectiveness Through Documented Checks, Equipment Status Confirmation & Approved Electrical Safety Procedures*
1215 – 1230	*Break*
1230 – 1330	***Proving Dead, Earthing & Short-Circuiting Procedures*** *Reviewing the Principles of Voltage Absence Verification, Approved Voltage Detection Devices & Safe Testing Arrangements • Understanding the Requirements for Proving Voltage Indicators Before & After Use, Where Applicable to the Equipment & Procedure • Identifying Suitable Earthing Points, Earthing Equipment, Short-Circuiting Arrangements & Protective Earthing Requirements • Applying Approved Sequences for Proving Dead, Establishing Safety Earths & Confirming the Electrical Safety Condition Before Work*
1330 – 1420	***Practical Switching & Isolation Simulation*** *Preparing a Detailed Switching Programme for a Representative MV/HV Distribution Network Using an Approved Operating Scenario • Conducting Simulated Switching Operations, Isolation Procedures, Lockout/Tagout Arrangements & Operational Communications • Demonstrating Safe Verification of Isolation, Voltage Absence Testing & Application of Earthing Arrangements Using Suitable Training Equipment • Evaluating Participant Performance Through Switching Simulations, Procedural Compliance Checks & Instructor-Led Feedback*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Two*

Day 3: ***Tuesday, 17th of November 2026***

0730 – 0830	***Electrical Permit-to-Work (PTW) Systems & Documentation*** *Understanding the Purpose, Structure & Requirements of Electrical Permit-to-Work Systems for MV/HV Installations • Reviewing the Responsibilities of Authorised Persons in Preparing, Issuing, Receiving, Suspending, Cancelling & Closing Electrical Permits • Identifying the Requirements for Isolation Certificates, Limitation-of-Access Documents, Sanction-for-Test Documents & Associated Safety Records • Ensuring Proper Coordination Between Permit Issuers, Permit Holders, Maintenance Personnel, Contractors & Control-Room Operators*
0830 – 0930	***Safe Systems of Work & Worksite Control*** *Establishing Safe Working Boundaries, Designated Work Areas, Restricted Access Zones & Protective Barriers Around MV/HV Installations • Reviewing the Requirements for Worksite Inspections, Pre-Job Safety Briefings, Toolbox Talks & Verification of Electrical Safety Precautions • Managing Simultaneous Operations, Multiple Work Groups, Overlapping Permits & Electrical Interfaces Between Contractors • Implementing Procedures for Work Suspension, Shift Handover, Changes in Work Scope & Restoration of Safe Working Conditions*
0930 – 0945	*Break*

0945 – 1100	***MV/HV Electrical Maintenance & Inspection Safety*** *Reviewing Preventive, Predictive & Corrective Maintenance Requirements for MV/HV Switchgear, Transformers, Cables & Electrical Distribution Equipment • Identifying Maintenance-Related Electrical Hazards Associated with Insulation Deterioration, Mechanical Defects, Overheating & Equipment Contamination • Understanding Safe Access Requirements, Maintenance Isolation Arrangements, Inspection Procedures & Equipment Condition Assessments • Applying Electrical Safety Precautions During Equipment Servicing, Inspection, Component Replacement & Maintenance Verification*
1100 – 1215	***Electrical Protection Systems & Fault Management*** *Understanding the Operating Principles of Overcurrent, Earth Fault, Differential, Distance & Transformer Protection Systems • Reviewing Protection Relays, Current Transformers, Voltage Transformers, Protection Settings & Circuit Breaker Tripping Arrangements • Identifying Common MV/HV Electrical Faults, Including Short Circuits, Earth Faults, Insulation Failures & Equipment Protection Operations • Evaluating the Authorised Person's Responsibilities During Protection Trips, Fault Investigations, Equipment Isolation & Restoration Planning*
1215 – 1230	*Break*
1230 – 1330	***Electrical Testing, Commissioning & Safety Precautions*** *Reviewing Electrical Testing Requirements for Insulation Resistance, Continuity, Earthing Systems, Circuit Breakers & Protection Devices • Understanding the Safety Precautions Associated with High-Voltage Testing, Test Equipment Selection & Temporary Test Connections • Managing Test Permits, Controlled Access, Temporary Removal of Safety Earths Where Specifically Authorised & Reinstatement of Protective Arrangements • Ensuring Appropriate Testing Documentation, Equipment Status Verification, Test Result Review & Approval Before Returning Equipment to Service*
1330 – 1420	***Practical Permit-to-Work & Maintenance Safety Exercises*** *Preparing a Simulated Electrical Permit-to-Work Package for Maintenance Activities on an MV/HV Switchgear Installation • Conducting a Role-Playing Exercise Involving Permit Issuance, Isolation Verification, Worksite Handover & Permit Closure • Evaluating Electrical Maintenance Scenarios Involving Multiple Contractors, Changing Work Conditions & Conflicting Operational Requirements • Reviewing Sample Permit Documentation, Identifying Procedural Deficiencies & Recommending Corrective Actions to Improve Electrical Safety Compliance*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Three*

Day 4: ***Wednesday, 18th of November 2026***

0730 – 0830	***Advanced MV/HV Operational Risk Management*** *Evaluating Complex Electrical Operating Scenarios Involving Interconnected Substations, Multiple Power Sources & Critical Distribution Networks • Identifying Risks Associated with Parallel Operations, Transformer Energisation, Switching Transients & Abnormal Network Configurations • Reviewing Electrical Operational Risk Controls for Maintenance Outages, Emergency Switching & Network Reconfiguration • Applying Risk-Based Decision-Making Techniques to Determine Safe Operating Conditions, Equipment Availability & Operational Restrictions*

0830 – 0930	***Substation Safety & Control of Electrical Access*** *Reviewing Substation Access Authorisation Requirements, Controlled Entry Procedures, Key Management & Visitor Supervision Arrangements • Identifying Hazards Associated with Exposed Conductors, Restricted Spaces, Cable Basements, Battery Rooms & Auxiliary Electrical Systems • Understanding Safety Arrangements for Indoor Substations, Outdoor Switchyards, Transformer Compounds & Electrical Control Rooms • Implementing Site-Specific Safety Controls, Emergency Access Arrangements, Warning Notices & Environmental Protection Measures*
0930 – 0945	*Break*
0945 – 1100	***Electrical Emergencies, Incident Response & Rescue Procedures*** *Identifying Emergency Conditions Involving Electric Shock, Arc Flash Incidents, Electrical Fires, Equipment Explosions & Loss of Electrical Supply • Reviewing Emergency Response Arrangements, Alarm Activation, Incident Reporting & Coordination with Emergency Response Teams • Understanding Safe Electrical Rescue Principles, Emergency Isolation, First-Aid Response & Cardiopulmonary Resuscitation (CPR) Awareness • Evaluating Electrical Incident Scenarios to Identify Immediate Protective Actions, Communication Requirements & Post-Incident Safety Measures*
1100 – 1215	***Electrical Fault Response & Emergency Switching*** *Reviewing Procedures for Responding to Unexpected Protection Trips, Loss of Supply, Transformer Failures & Abnormal Switchgear Conditions • Understanding Emergency Switching Authorisation, Control-Room Coordination, System Status Verification & Operational Restrictions • Identifying the Precautions Required Before Attempting Fault Isolation, Network Reconfiguration or Restoration of Electrical Supplies • Applying Structured Fault Response Procedures Through Simulated Scenarios Involving Feeder Failures, Busbar Faults & Transformer Outages*
1215 – 1230	*Break*
1230 – 1330	***System Restoration, Re-Energisation & Return-to-Service Procedures*** *Reviewing the Requirements for Safe System Restoration Following Planned Maintenance, Equipment Testing or Electrical Emergencies • Verifying Work Completion, Personnel Withdrawal, Tool Clearance, Permit Closure & Reinstatement of Protective Equipment • Understanding the Approved Sequence for Removing Temporary Earths, Releasing Isolations & Restoring Electrical Equipment to Service • Coordinating Re-Energisation Approvals, Operational Communication, Equipment Monitoring & Documentation of Restored Network Conditions*
1330 – 1420	***Practical Emergency Response & Operational Decision-Making*** *Conducting Simulated Electrical Emergency Scenarios Involving Switchgear Faults, Unexpected Energisation Risks & Loss of Critical Electrical Supplies • Preparing Emergency Switching Plans Based on Representative MV/HV Single-Line Diagrams & Operational Conditions • Demonstrating Decision-Making During Abnormal Electrical Situations, Including Stopping Work, Escalating Hazards & Coordinating Response Teams • Evaluating Emergency Response Effectiveness Through Practical Exercises, Group Discussions & Lessons Learned from Electrical Incidents*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Four*

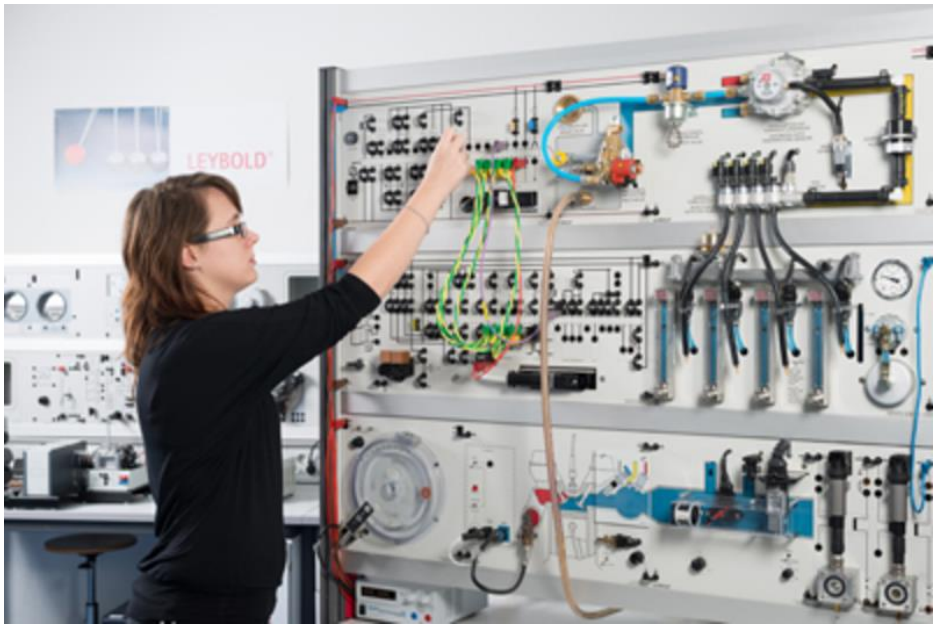
Day 5: Thursday, 19th of November 2026

0730 – 0830	***Authorised Person Competency Requirements & Regularisation Criteria*** *Reviewing the Knowledge, Practical Skills, Operational Experience & Safety Behaviours Required for Continued MV/HV Authorised Person Status • Understanding Organisational Competency Frameworks, Authorisation Categories, Operational Limitations & Reauthorisation Requirements • Identifying Competency Gaps Associated with Switching Operations, Isolation Procedures, Permit Management & Electrical Safety Responsibilities • Establishing Individual Competency Development Plans, Refresher Training Requirements & Ongoing Professional Development Objectives*
0830 – 0930	***Review of Electrical Safety Rules & Operational Compliance*** *Consolidating the Requirements of Electrical Safety Rules, Switching Procedures, Permit-to-Work Systems & Electrical Isolation Arrangements • Reviewing Common Non-Compliances, Procedural Violations, Human Factors & Organisational Weaknesses Affecting Electrical Safety • Examining Lessons Learned from Electrical Accidents, Switching Incidents, Isolation Failures & Maintenance-Related Near Misses • Applying Compliance Verification Techniques, Operational Audits & Corrective Action Planning to Improve Electrical Safety Performance*
0930 – 0945	*Break*
0945 – 1030	***MV/HV Switching & Isolation Competency Assessment*** *Assessing Participants' Ability to Interpret Single-Line Diagrams, Identify Electrical Equipment & Establish Appropriate Switching Boundaries • Evaluating the Preparation of Switching Programmes, Operational Risk Assessments & Communication Arrangements • Demonstrating Simulated Isolation, Lockout/Tagout, Voltage Absence Verification & Protective Earthing Procedures • Assessing Participants' Ability to Recognise Unsafe Conditions, Respond to Unexpected Events & Comply with Approved Electrical Safety Rules*
1030 – 1130	***Permit-to-Work & Operational Responsibility Assessment*** *Evaluating Participants' Ability to Prepare, Review, Issue & Close Electrical Permits in Accordance with Organisational Procedures • Assessing the Identification of Electrical Hazards, Verification of Isolation Requirements & Establishment of Safe Working Conditions • Demonstrating Effective Coordination Between Authorised Persons, Maintenance Teams, Control-Room Operators & Other Responsible Personnel • Reviewing Individual Performance in Permit Control, Worksite Safety Management, Procedural Compliance & Operational Decision-Making*
1130 – 1200	***Integrated MV/HV Operational Scenario & Practical Assessment*** *Conducting a Comprehensive Simulated MV/HV Maintenance Scenario Involving Switching Planning, Equipment Isolation & Permit Preparation • Demonstrating the Complete Sequence of Safe Work Preparation, Electrical Safety Verification, Worksite Handover & Operational Control • Managing Simulated Abnormal Conditions, Including Protection Trips, Unexpected Equipment Status Changes & Emergency Response Requirements • Completing the Simulated Restoration Process, Including Permit Closure, Isolation Release, System Re-Energisation & Operational Documentation*
1200 – 1215	*Break*

1215 – 1300	***Final Competency Evaluation, Regularisation Review & Continuous Improvement*** *Conducting a Comprehensive Theoretical Assessment Covering MV/HV Electrical Safety, Operational Responsibilities, Switching, Isolation & Permit Systems • Evaluating Practical Competency Through Structured Observation, Scenario-Based Questioning & Assessment Against Defined Performance Criteria • Reviewing Individual Assessment Outcomes, Identifying Competency Deficiencies & Recommending Additional Training or Supervised Practical Experience • Preparing Individual Regularisation Recommendations, Competency Records & Continuing Development Plans for Consideration by the Organisation's Designated Authorising Authority*
1300 – 1315	***Course Conclusion*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course*
1315 – 1415	***COMPETENCY EXAM***
1415 – 1430	*Presentation of Course Certificates*
1430	*Lunch & End of Course*

Practical Sessions

This practical and highly-interactive course includes the following practical sessions using Haward's HV Switchgears: -



(1) Switching Programs
(2) Isolation Certificates
(3) Electrical Permit to Work
(4) Danger Notices & Pre-Cautions
(5) Sanction for Test
(6) Lock-Out & Tag-Out
(7) Safe Key Systems
(8) Electrical Safety Systems-Interlocks-Earthing-Isolation & Access Control
(9) Fault Reports

Course Coordinator

Mari Nakintu, Tel: +971 2 30 91 714, Email: mari1@haward.org