THE STRATEGIC SHIFT OF 33KV OVERHEAD LINES MAINTENANCE REGIME APPROACH



4-8 JULY 2022

Organised by:



11:00 -17:00 Malaysia (GMT +8)



Digital Learning (Webex)





This course is to provide an overall understanding of how the Distribution Network (DN) department maintains the Overhead Lines (OHL) assets and derive the appropriate approaches to inspect, test, and maintain according to the industry best practices and compliance safety aspects. These maintenance regimes include visual inspections, routine maintenance, preventive maintenance, and condition-based maintenance. In addition, this course provides an overview of the TNB value chain consisting of the Generation, Grid, and Distribution Department.

Power utility companies worldwide implement various inspection methods to evaluate the condition of overhead line systems. Each technique has its benefit and limitation. Because of that, every available method needs to be employed together, for example, Ultrasound Detection (USD) technique and Infrared Thermography (IRT), to have a more conclusive judgement on the condition of the network system. This strategic shift in the maintenance regime of 33kV Overhead Lines brings value to the company in cost-saving and system reliability.

Course Objectives:

Upon completion of this course, participants will be able to:

- Explain the TNB electrical power system e.g. Generation, Grid, and Distribution Network department
- Identify the overhead lines system which consists of Medium Voltage Bare Overhead Lines (MV BOH) and Medium Voltage Aerial Bundled Cable (MV ABC) in Distribution Network (DN)
- Classify the maintenance strategies used in TNB's overhead lines system
- Explain the elemental inspection related to Condition Based Maintenance (CBM), for example, Infrared Thermography (IRT) and Ultrasound Detection (USD) Technique

Target Participants:

Engineer and Non engineer (working technical background)

Course Content:

Topics to be covered in the training program includes:

Day 1

- TNB Value Chain At Glance Generation, Grid & Distribution Network Division
- Overview of OHL's maintenance strategy and its impact

Day 2

 Thermal imaging and how its work to improve overhead lines network?

Day 3

Ultrasound detection technique for overhead lines inspection

Day 4

 Vegetation Management and way forward of leveraging drone technology for overhead lines system

ABOUT TNB ILSAS

TNB Integrated Learning Solution: ILSAS is a premier technical training institute committed to providing excellence in training and services. In line with that, ILSAS works with experts in power utility engineering and a complete range of facilities. ILSAS is a wholly-owned subsidiary of Tenaga Nasional Berhad, Malaysia's largest power utility company.

We do it with the latest teaching methods, a vast pool of qualified and experienced trainers, having access to effective training tools and high-investment environments, and in full accordance with global industry standards, technological and regulatory.

More about us in www.tnbilsas.com.my

ABOUT MTCP

The Malaysian Technical Cooperation Programme (MTCP) was officially launched on 7 September 1980 at the Commonwealth Heads of State Meeting in New Delhi, India, to signify Malaysia's commitment to the South-South Cooperation, in particular, the Technical Cooperation among Developing Countries (TCDC).

The MTCP emphasizes on the development of human resources through the provision of training in various areas which are essential for a country's development such as agriculture, economy, finance, public management and administration, science & technology and ICT, health diplomacy, safety and security including cyber security, cultural diplomacy, social development, environment-related to SDG2030, education, industrial and technical training.

Annually, Malaysia offered more than 60 technical and capacity-building programs under the MTCP, which have benefited more than 35,500 participants from 144 countries.

Objectives of MTCP

- To share the development experience with other countries;
- To strengthen bilateral relations between Malaysia and other developing countries;
- To promote South-South Cooperation (SSC); and
- To promote technical cooperation among Developing Countries.

Application:

- The course fees are **fully sponsored** by the Government of Malaysia.
- Applications should be made using the prescribed MTCP forms available at http://mtcpcoms.kln.gov.my/mtcpcoms/upload/MTCP_2022_ApplicationForm.pdf
- MTCP application forms can also be obtained from the nearest Malaysian Embassy/High Commission in recipient countries.
- All application forms must be duly completed and endorsed by the Ministry of Foreign Affairs or National Focal/Aid Coordinator Agency in the respective countries and submitted ONLY through the diplomatic channel via the Embassy/High Commission of Malaysia.
- Only successful applicants will receive the Official Invitation notification one (1) week from the course date, by the Training Institute via email.
- Application closing date: 3 June 2022

Terms of Award:

- A degree holder / technical background
- Minimum working experience of 1 year
- Must have a minimum 1 year experience in utility industry
- Good command of English –spoken &written

Coordinator:

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