Technical Visit to TNB ILSAS

by Dr Siow Chun Lim and Alex Looi Tink Huey

Dr Siow Chun Lim and Alex Looi Tink Huey are currently general committee members' in Electrical Engineering Technical Division (EETD).

On 3rd May, the IEM Electrical Engineering Technical Division (EETD) has successfully organised a technical Visit to TNB ILSAS. The group of 18 from IEM gathered at ILSAS at 9:30am and were then given a brief introduction of ILSAS by En. Noor Azmi (Manager of Marketing & Sales of ILSAS) as shown in Figure 1.

Figure 1: Welcoming remark and brief introduction of ILSAS

ILSAS is a technical training institute which is a wholly owned subsidiary of Tenaga Nasional Berhad. It has provided training to clients from ASEAN and several parts of the world. Equipped with a complete range of power utility engineering facilities means that ILSAS is able to provide a comprehensive training especially for electrical engineers, technologists and technicians. Table 1 shows the schedule of the visits at ILSAS.

Event	Venue
11kV simulator	Block C
Protection lab	Block C
Distribution facilities	Distribution Workshop
Overhead cable facilities	Overhead Workshop
Underground cable facilities	Cable Workshop
Renewable energy center	IREC Lab

Our first stop was at Block C where Mr. Mok stressed the importance of safe switching procedures. Before issuing Permit To Work (PTW) for any electrical works, the competent person shall isolate, proof dead and earth to ensure utmost safety. PTW should be issued to a particular unit despite the entire system being de-energised. Mr. Mok also explained the difference between discharge and earth.

Figure 2: Mr. Mok demonstrating the procedures of safe switching

The figures below are self-explanatory of the remaining portions of the visit. It was noted that TNB is gradually migrating to GIS switchgears from 33kV to 11kV.

Figure 3: Demonstration of power system protection scheme

Figure 4: At the Overhead Cable Workshop. Public street lighting system is visible at the back.

Figure 5: Rooftop of IREC. Wind direction, irradiation level, cell and ambient temperature are being monitored.