

UMS engineering students gain invaluable experience visiting Mengalong Substation

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SIPITANG: Future electrical engineers from Universiti Malaysia Sabah (UMS) gained an invaluable experience by visiting the 275/132kV PMU Mengalong Substation on November 1.

The educational visit, successfully organized by the Institution of Engineers, Malaysia (IEM) (Sabah Branch), in collaboration with Sabah Electricity Sdn Bhd and UMS, provided third year Electrical and Electronic (E&E) Engineering students with a critical, real-world perspective on the backbone of Sabah's high-voltage transmission network.

The delegation, comprising aspiring engineers, was led by Ahmad Razani Haron, lecturer from the UMS Engineering Faculty. The IEM (Sabah Branch) was represented by Ir. Ts. Leona Ng, PMP, Executive Committee Member, who spearheaded the initiative and Ir. Dr Chua Bih Lii, Co-Opted Committee Member.

The students were graciously

hosted by Sabah Electricity's Ir. Ts. Felix Ho, Chief Engineer of Transmission Operation & Maintenance (Western Region), who alongside his expert team, conducted a detailed and highly technical briefing.

The session provided a deep dive into the functions and operational mechanisms of the primary and secondary equipment.

This practical exposure was essential in bridging theoretical knowledge with practical application, showcasing how these systems work in synergy to ensure the reliable transmission of electricity across Sabah.

The 275/132kV PMU Mengalong is a cornerstone of Sabah's power infrastructure. Completed in 2019, the substation serves as the main intake substation for Sabah power grid, playing a crucial role in monitoring and managing high-voltage power as it enters the network. This central node significantly enhances

the reliability and security of the grid, supporting efficient load management and system resilience.

Crucially, the Mengalong substation is also vital for the regional interconnection with Sarawak, facilitating synchronized power transfer and ensuring stable cross-border operation. This interconnection is paramount to supporting Sabah's reserve margin, reducing the risk of power shortages during peak demand or unforeseen events and ultimately strengthening the state's energy security and power system resilience.

Datuk Ir. Ts. Mohd Yaakob bin Jaafar, Branch Chairman of IEM (Sabah Branch), has always been a strong proponent of practical exposure for engineering students and encourages industries to bridge the gap between classroom theory and real-world application, just as Sabah Electricity has done with this vital technical visit.



Delegates attending the technical visit to 275/132kV PMU Mengalong.