

# WEBINAR Talk: Lightning Impact On High Voltage Overhead Power System

**FRIDAY | 26<sup>th</sup> June 2020 | 3.00PM – 4.30PM**

Organised By : Consulting Engineers, Special Interest Group



## Synopsis:

Lightning has been a major cause of disturbance to the electrical power system especially on the overhead (OH) distribution and transmission lines. Electric power utilities in the world are fully aware of this situation where multiple actions have been implemented to overcome issues related to lightning.

In this sharing session, participants will be exposed with the fundamental knowledge of lightning which includes the types, strength and its formation. TNB Lightning Detection Network (LDN) and the historical statistics will be presented, together with the case study for 500kV lightning performance study in Malaysia. OH lines lightning protection software will also be demonstrated to show how these programs were used to assist the decision making when placing lightning protection devices or equipment on the OH system.

Finally, an introduction to WG33-01:1991 & IEEE Std 1243:1997 for overhead transmission lightning protection will be discussed.

By end of the talk, participants will appreciate the fundamentals of this spectacular phenomenon and learn the impact of lightning to the performance of OH lines.

## Speaker : Ir. Dr. Iryani Mohamed Rawi PhD(EP), PEPC(EE), PE(EP), SMIEM

Dr. Iryani is the Head of Product Certification, Quality Assurance Unit at TNB Labs Sdn. Bhd. She obtained her PhD in Electrical Power Engineering from Universiti Putra Malaysia. She started her career in Tenaga Nasional Berhad in 2002 as an Electrical Engineer, specialized in Overhead Transmission Lines equipment from 66kV to 500kV and lightning protection for power system. In 2017, she was appointed as Head (PC) in TNB Labs, responsible for the certification of electrical and non-electrical products used in TNB. She is also involved in product inspection and audits for new and existing product which includes LV/MV Distribution and HV Transmission equipment.



Her involvement in quality includes being a Kaizen Practitioner, certified Lead Auditor/Accessor for ISO9001:2015, and Certified Manager of Quality/Organizational Excellence (CMQOE) by ASQ.

She is passionate about her work, energetic and always excited to learn new skills and information from various areas. She is currently mastering knowledge related to Data Science, Python, Digital Transformation (IR4.0), and Statistical Data Analysis which includes Big Data.