RISK ASSESSMENT OF LIGHTNING PROTECTION SYSTEM USING COLLECTION VOLUME METHOD AT FACULTY OF ARCHITECTURE, PLANNING AND SURVEYOR IN UiTM SHAH ALAM.

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UNIVERSITI TEKNOLOGI MARA

MALAYSIA

HAIDZUM HAZWANI BINTI HAIRI

2010880814

Faculty of Electrical Engineering

UNIVERSITI TEKNOLOGI MARA

40450 SHAH ALAM, SELANGOR DARUL EHSAN

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ABSTRACT

This paper described case study on risk assessment of lightning protection system using Collection Volume Method at Faculty of Architecture, Planning and Surveyor in UiTM Shah Alam. Apparently, lightning is a bright flash of electricity that is produced by a thunderstorm. Malaysia also recorded as second country with the highest number of lightning strikes in the world. Lightning is considered the worst natural killer, causing at least 25,000 deaths worldwide each year [2]. Records stated that the number of lightning in Malaysia was double of that in Florida [2]. But Malaysian is still not aware of its dangers. Risk assessment is a procedure use to detect potential hazard and analyze the possible occurrence happen towards the building and assets by using the suitable lightning protection system (LPS). The assessment of risk due to all possible effects of lightning flashes to a structures and services is done according to Malaysian Standard MS IEC 62305. The tolerable risk (R_T) and all relevant risk components (R_1) are being compared to decide whether the structure needs to be protected or not. If R_1 is happen to be greater than R_T, the structure is protected and vice versa. Through out of this project, the Collection Volume Method (CVM) will prove either the structure is safe or not. At the end of this paper, the analyzed data will present the reliability or any improvement of the protection system.

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