

A Model for Analysis the Induced Voltage of 115 kV On-Line Acting on Neighboring 22 kV Off-Line

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Abstract : This paper presents a model for analysis the induced voltage of transmission lines (energized) acting on neighboring distribution lines (de-energized). From environmental restrictions, 22 kV distribution lines need to be installed under 115 kV transmission lines. With the installation of the two parallel circuits like this, they make the induced voltage which can cause harm to operators. This work was performed with the ATP-EMTP modeling to analyze such phenomenon before field testing. Simulation results are used to find solutions to prevent danger to operators who are on the pole.

Keywords : transmission system, distribution system, induced voltage, off-line operation

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