عنوان مقاله:

Dynamic Calculation of Leakage Current and Electric Field of Distribution polymeric insulator under pollution layer

محل انتشار:

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نویسندگان:

Mohammad Mehdi Khademi - *Hormozgan electric power distribution company*

Abdolsaheb Arjomand - *Hormozgan electric power distribution company*

Hamid Saedpanah - *Hormozgan electric power distribution company*

خلاصه مقاله:

This paper presents two different methods to calculate the leakage current (LC)along a 20 kV silicone rubber (SiR) insulator surface. The first method which is based onfield theory approach uses the Comsol software to compute the leakage current. Thesecond method is based on Young model. Simulation approach was compared with thecircuit theory model which developed by Young. This paper investigates the use of adynamic pollution model to compute the electric field distribution along the leakage path.Also, the results show that the voltage and electric field distribution along silicone rubberinsulator under wet polluted conditions are dependent on the insulator surfaceconductance and .the magnitude of the E-field close to the energized end fitting is higherthan the grounded end

کلمات کلیدی: