

CHAPTER 57
TECHNOLOGY
ELECTRICAL ENGINEERING

Doctoral Theses

463. GUPTA (Rachana)
Sensitivity Analysis of Multi Conductor Digital Transmission Lines.
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Abstract

This work has studied the pre determination of corona current due to EHV lines. Sensitivity analysis of the corona current signals. Fuzzy logic model of corona current signals. Development of digital model of multi conductor transmission lines and sensitivity analysis of digital model of transmission lines. Using fuzzy logic, it analysed by, Fuzzification - a process of mapping/transformation of approximate crisp value into fuzzy set of values, Inferencing - processing of fuzzy set of values using the knowledge based rule and Defuzzification - obtaining back the crisp value.

Contents

1. Introduction. 2. Literature review. 3. Prediction and feild measurements of corona noise due to HVAC lines. 4. Sensitivity model of corona currents. 5. Fuzzy model of corona currents due to EHV lines. 6. Digital model of transmission lines. 7. Discrete sensitivity model of transmission lines. 8. Conclusions and scope for further work. Bibliography and appendix.