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(57) Abstract :

Transmission lines are critical components of every electric power system. Transmission lines are more prone to failure than other main components due to the fact that they are located in open air. With the help of a transmission line model, this research has attempted to address the problems of fault detection and classification, as well as fault location forecasting. The accuracy with which defects are detected and classified in a power system is critical to the system's overall stability, dependability, and uninterrupted service. The purpose of virtual reality is to bring computers and their users even closer together in their interactions. Transmission system security necessitates the development of fault assessment algorithms that are both exceedingly exact and efficient. The chore of maintaining even a lengthy transmission line in remote areas where patrolling is difficult and time-consuming becomes a considerable undertaking.

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Abstract:

Transmission lines are critical components of every electric power system. Transmission lines are more prone to failure than other main components due to the fact located in open air. With the help of a transmission line model, this research has attempted to address the problems of fault detection and classification, as well as fa forecasting. The accuracy with which defects are detected and classified in a power system is critical to the system's overall stability, dependability, and uninterruptec purpose of virtual reality is to bring computers and their users even closer together in their interactions. Transmission system security necessitates the development assessment algorithms that are both exceedingly exact and efficient. The chore of maintaining even a lengthy transmission line in remote areas where patrolling is di time-consuming becomes a considerable undertaking.

Complete Specification

Claims:Claims

- Using the F-SVM approach for fault detection in hybrid transmission systems.
- Some of the existing methodologies for transmission line fault classification and localization have been investigated.
- The proposed schemes of fault classification and localization is that the methods do not use high computational analysis, except for one or two of the propose models.

, Description:Field of Innovation

The transmission of electrical electricity is one of the most extensive and far-reaching technical systems now in use. A wide variety of landscapes, including farmlan mountains, deserts, and barren plains are covered by overhead transmission lines. Due to their constant exposure to the elements, these can suffer from short- to term malfunctions as a result of storms, hails, snow, rain and wind. There are many additional elements that might produce short circuits between the lines and the other than natural calamities such as different animals, birds, and other insects. This results in a major breakdown in the flow of power. This means that the reliabil continuity of the electricity system have often been jeopardised due to a variety of environmental interventions. Indeed, the study of electrical power systems has l been a primary priority for scientists. Researchers have spent a great deal of time studying power system operation, control, protection, and fault diagnosis approa Various study approaches have been developed by scientists in an effort to create a long-term power system protection system.

The goal of virtual reality is to make computers and their users more closely intertwined. Additionally, it makes an effort to arouse the senses of the viewer in order

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