

عنوان مقاله:

A model for prediction of ice flashover faults in power grid with respect to meteorological parameters

محل انتشار:

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خلاصه مقاله:

Ice Flashover Fault (IFF) is a vulnerable phenomenon in the transmission lines of power grids. In this article a model for prediction of IFFs number is proposed. Meteorological parameters are used as an input data and the number of IEFs is determined as an output value. Because of limited experiences and lack of useful data, a model based on Support Vector Regression (SVR) is used. The model parameters are determined by using particle swarm optimization (PSO) method, then, the influence of each input parameters on IFF occurrence were studied and some system reliability parameters are achieved. The results are compared with the previous models proposed by others and the validation of proposed model is confirmed.

کلمات کلیدی:

Ice storm; ice flashover fault; reliability; prediction; small sample modeling; machine learning

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