

Current status and future challenge technology of measures to reduce impact of natural disasters

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Abstract

As one of the social life lines, an overhead transmission line transport the large electric power from a power station to the substation bound for the next substation and run on a hills and fields, across the mountain, stepping over the sea so that are suffered directly by the impact of natural disasters such as lightning, the typhoon, the ice and snow storm and birds or beasts.

Therefore, when the overhead transmission line (structure) were designed, constructed, operated and maintained, the design items of the maximum wind speed, the maximum icing and snow load and etc. were assumed the design values based on the return period of 50 years for a representative on the design side and it had been executed while being devised and improved against a thunder storm, a typhoon, an ice and snow storm and the galloping phenomena considering the experience rule for these impact in a past.

In this paper, the recent approach and future challenge in Kansai Electric Power Company on the situation and measure reducing impact of the natural disasters to the overhead transmission line are described.