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Research on familial defect attribution technology of measurement assets based on improved hierarchical clustering algorithm and knowledge graph

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May 26, 2023

Abstract

A large amount of data has been accumulated in the technical supervision work of power grid enterprises for many years. Considering that the family defects of power equipment have a great influence on equipment condition assessment, this paper introduces an improved hierarchical clustering method based on the analysis of the traditional hierarchical clustering method to automatically identify and cluster the family status data of power equipment. The quantitative assessment of the family defect factor is then given. The family defect assessment is combined with the MMS communication network equipment in the substation communication network, which effectively and reasonably reflects the impact of various types of family defects on the health status of the equipment and provides a strong basis for maintenance decision making.

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