

Asset Management Support Tools for Electric Power Equipments Based on Maintenance Cost

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Abstract

This presentation provides two examples of asset management decision support tool based on the analysis result of real maintenance cost provided by utility companies in Japan. The features of real maintenance cost strongly depend on power equipment types. One example of support tool is developed for overhaul planning of 66kV power transformers and the other is for renewal planning of Gas insulated Circuit Breakers (GCB). The annual maintenance cost of power transformers seems to be simply increasing with service time and to the contrary that of GCBs was found to be decomposed into four different categories. With those basic analysis of maintenance cost, effective tools were developed with cooperation of utility members and those tools have been used in actual overhaul planning and renewal planning. It is emphasized that analysis and characterization of the real maintenance costs is inevitable or otherwise the tools may not be useful for utility companies and parameterization method of the cost must be determined in accordance with utility company's management policy.