Life Time Estimation Method for the Feeding Transformers

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In order to prevent equipment damage and to extend equipment lifetime, the early detection of the deterioration and residual life assessment are necessary in feeding transformers. So, we constructed three types of the condition databases related to the feeding transformers. First, we researched load characteristics to evaluate the thermal deterioration. Second, we researched analytical data of the dissolved gas-in-oil to evaluate the damages of partial electric discharge. Third, we researched the amount of furfural to evaluate the deterioration characteristics of the insulating paper for feeding transformers. Based on the results of the above-mentioned researches, we developed a life time estimation method for the feeding transformers. The validity of the estimation method is verified by a comparison between the experimental values and the values estimated.