Life Prediction of Condenser Tubes Applying Fuzzy Logic and Neural Network Algorithms

Authors : A. Majidian

Abstract : The life prediction of thermal power plant components is necessary to prevent the unexpected outages, optimize maintenance tasks in periodic overhauls and plan inspection tasks with their schedules. One of the main critical components in a power plant is condenser because its failure can affect many other components which are positioned in downstream of condenser. This paper deals with factors affecting life of condenser. Failure rates dependency vs. these factors has been investigated using Artificial Neural Network (ANN) and fuzzy logic algorithms. These algorithms have shown their capabilities as dynamic tools to evaluate life prediction of power plant equipments.