Load shedding scheme in large pulp mill by using analytic hierarchy process

Abstract:

Pulp mill is one of the heavy industries that consumes large amount of electricity in its production. In particular, the breakdown of the generator would cause other generators to be overloaded. Thus, load shedding scheme is the best way in handling such condition. Selected load will be shed under this scheme in order to protect the generators from being damaged. In the meantime, the subsequence loads will be shed until the generators are sufficient to provide the power to other loads. In order to determine the sequences of load shedding scheme, analytic hierarchy process (AHP) is introduced. Analytic Hierarchy Process is one of the multi-criteria decision making methods. By using this method, the priority of the load can be determined. This paper presents the theory of the alternative methods to choose the load priority in load shedding scheme for a large pulp mill.