ABSTRACT

PT SAF offers spare parts of rotating equipment such as gas turbines, steam turbines, centrifugal compressors, and some other turbomachinery equipment. PT SAF has a raw material warehouse to store raw materials needed to produce spare parts of rotating equipment machinery. The supply of PT SAF raw materials of course must be well managed. However, there is a problem in the supply of raw materials of PT SAF, namely the occurrence of stockpiling or overstock on the supply of raw materials of PT SAF. After viewed in aggregate and per-SKU, raw material stocks indicated overstock with 80% percentage of SKU which more often experience overstock condition in inventory planning period. Then after the overstock problems are known, ADI-CV analysis will be used as references for method selection. From analysis of ADI-CV result, it is known that 95% of the raw materials have lumpy demand characteristic with the rest of SKU's have slow moving and erratic demand characteristic. Then periodic review method has been selected based on lumpy characteristics. After that, the systems R,s,S and R,S are compared against Lumpy SKU's and R,s,Q systems is used against slow and erratic SKU's.

After performing the calculation and the sensitivity analysis, it can be concluded that for the proper use of periodic review for SKU lumpy in PT SAF is R,s,S system is selected and R,s,Q system for slow moving and erratic raw materials. Total cost savings when used both systems amounted to 4.8 million rupiah or 8.082% and resulted in service level reached 99.832%. Then the overstock reduction amounted to 77.762% of the actual stock.

Keywords: Inventory Policy, Periodic Review, ADI-CV, Raw Materials, Overstock