

Abstract

In the master's thesis, measures were developed for introducing a frequency-controlled drive to the pumps, fans and compressors of JSC "AIES" TPP-2 through the use of calculation applications. The condition analysis of pumps, draft-blowing mechanisms and compressors for 5 years is performed. The Turkish experience with the application of VFD for primary air fans is considered. Calculations of energy consumption and energy saving by pumps, ID fan and compressor of TPP-2, as well as their payback and emissions were made in applications such as EneSaveCalc, WEG Energy Saving Estimator and ABB EnergySave Calculator. An application of the pulsation damping filter for the VPZ-20/8 compressor using the Parker Energy Saving Calculator is proposed. The idea of retrofitting the Crawl robot to create a mini-model of the CHP circulation pump was put forward.