Abstract

A thermal power plant is run with an objective to reduce - tube failures, un-burnt coal, plant down time, operating cost as well to increase the production. It is desirable to have minimal maintenance and Plant Load Factor (PLF) achieved is better than 90%. To achieve these goals higher, recently at Kota Super Thermal Power Station (KSTPS) the plant control system was
upgraded at unit – 1 & 2 from Trans-data technology to Distributed Control System (DCS) technology. The Unit – 1 & 2 represent 2 X 110 MWs capacity. The up gradation was carried out in 2010. The objective was achieved with remarkable improvement in the Un-burnt coal, Boiler Tube leakage and plant availability > 95%. This paper aims to present the salient features of this up gradation along with overall results as a case study. It also indicates the significance in cost and environmental saving achieved.

Reference
- Technical Specification of Stage-I, KSTPS documentation of plant-I design.
- Daily Log sheets of various Parameters (Stage-I) for last six years, KSTPS, Kota.

Index Terms
Computer Science
Information
Technology

Key words
DCS
SADC
Local Pneumatic Controllers