



ABSTRACT

With the present economic difficulties and challenges of the Philippine Sugar Industry which has been termed a sunset industry, the Mill owners have to initiate innovative actions for them to survive and stay financially healthy.

‘ This study aimed to analyze factors and success indicators that will help decision makers in the industry to arrive at factual decisions for the company to improve its boiler efficiency.

‘ The causal comparative method of research design was used to determine the causes or reasons for the current status of the phenomenon under study. ‘ The results from two different methods or operational modes, techniques or procedures were compared using the t-test which showed the significant differences among the means of two methods being studied.

‘ Based on the research findings, it can be said that there is a significant difference before and after the use of automation on the



boiler efficiency of CADP in terms of fuel consumption and steam generation that will give substantial savings in the utilization of fuel.

Moreover, based on the findings, discussion and analysis, the following recommendations are forwarded: (1) Disseminate these research findings not only to Central Azucarera Don Pedro but to other players or other sugar mills in the industry. Decision makers in other sugar mills can replicate and validate the results of this research for them to have a logical basis to go into plant automation; (2) The framework of this research can be applied to other future studies not only in boiler automation but as well as to other specific areas, sections or even the whole manufacturing plant that needs to be automated with the main objective or purpose of increasing efficiency and economy; (3) There are many areas where this research may be extended. One such area is in the eventual upgrading of manual process controls to automatic controls of various areas of CADP which is envisioned to start by July 2001; (4) A future application will also include an assessment of different classes or types of automatic control systems to determine which option is better for a particular process application within CADP as well as with our sister company in Bacolod City,



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Negros Occidental, the Central Azucarera De La Carlota which will be modernized starting this year. This endeavor would significantly help decision makers to make better decisions about the type of automatic control systems that should be installed.

Hopefully this modern automatic control systems technology will be of great help to the sunset sugar industry to regain its competitiveness by increasing or improving its boiler efficiency and productivity, and be able to compete globally.

