REALIZATION AND DESIGN VIRTUAL PLANT HEAT RECOVERY STEAM GENERATOR FOR PROCESS CONTROL SIMULATOR WITH DCS CENTUM CS 3000

Nama : Agus Supriyanto (2206100722)
Pembimbing I : Ir. Katjuk Astrowulan, MSEE
Pembimbing II : Imam Arifin, ST, MT

ABSTRACT

In the process industry, the demand to always achieve high production turned out to have many problems in difficult and complicated controls. This is because once the various physical quantities with different characteristics in industrial processes. In addition, it also needs to make an instructional media for plant operators to learn the truth. It need to be made modeling process that can represent the actual process can be obtained in appropriate control strategies. To make a real simulator that can simulate the actual process required high cost. Therefore, the simulator is required made with cheaper price, efficient, and flexible.

In this final to designed a virtual plant Heat Recovery Steam Generator (HRSG) using Wonderware Intouch software for simulating process control. Virtual Plant Heat Recovery Steam Generator (HRSG) also associated with Distributed Control System (DCS) through a module input / output (I / O). The method used to integrate several of the software in this Final Project use OLE for Process Control (OPC). From the test results and analysis can be concluded that the DCS can control the virtual plant well with steady keadaan indicated by the error of less than 10%, but still there is a delay on the plant DCS due to the rather long response.

Kata Kunci: Process Control Simulator, Distributed Control System (DCS), OLE for Process Control (OPC), Heat Recovery Steam Generator (HRSG).
---------Halaman ini sengaja dikosongkan---------