

ABSTRACTION

As one of nature commodities, natural gas is very necessary existence until today. Indonesia itself was ranked 9th in the ranks of the countries largest natural gas producer in the world. High dependency and significant decreases of natural gas production in each year causes many concern by various parties. Declines resulting from the production wells age, the age of equipments and technologies also a system that is lacking in supporting fast and accurate decision-making are some of a few reasons for the decline in natural gas production in Indonesia. VICO Indonesia as one of the largest petroleum and natural gas in Indonesia also appear to struggle with this problem. This has become a particular concern by the company. The application of technology that can minimize these problems is felt very much needed. The technology itself named SCADA (Supervisory Control And Data Acquisition) which is equipped with dynamic web.

SCADA (Supervisory Control And Data Acquisition System) is a system that integrates the controlling and monitoring systems and also databases in a production process. While the dynamic web is a system shaped as a dynamic web application in which the parameters can accurately changing over time with the actual conditions. The use of this technology is considered as one of a best solution to comply with the importance of an integrated system with the condition of the existing production process.

The research will be a design of a monitoring and controlling system for delivery of natural gas based on SCADA system that is equipped with dynamic web. The system design begins with understanding the existing system of delivery of natural gas from wells to the gas plant. Followed by analyzing the existing system and designing SCADA system scenarios equipped with dynamic web. By developing the SCADA system that is equipped with dynamic web, the system will be able to minimize the existing problems in the existing system.

From the research results obtained the conclusion that a monitoring and controlling system based SCADA for natural gas delivery process equipped with dynamic web in VICO Indonesia has successfully designed. This system can help users to deal with the losses of natural gas and help the top management to take decisions quickly and accurately.

Keywords: Dynamic Web, database, HMI, PLC software, SCADA (Supervisory Control and Data Acquisition,) automation