ABSTRACT

Water is an important need that is utilized by humans. Along with population and economic growth, the need for clean water is increasing. The problems that arise in relation to groundwater resources are the uncontrolled use of water resources and decreasing water quality. Besides the uncontrolled use of water resources, the groundwater conditions used by the community have below average quality in meeting clean water standards. Telkom University is an institution that utilizes groundwater for various daily activities. But the observations that have been done, the water contained in Telkom University has poor water quality. In order to maintain the water content in accordance with the standards and associated cooking distribution can be avoided required system to control and monitor the process centrally using SCADA which consists of program design, HMI, and database. In this study also aims to reduce the time of control and monitoring and reduce the labor required. Based on the problems that have been described, it will be conducted research that discusses the design of automation systems processing and distribution of clean water at Telkom University.

Key Words: Water, water distribution, SCADA, automation, PLC, HMI