

ABSTRACT

Judging from the growing needs of the community for increasing electrical equipment, electricity is a primary need. The source of electrical energy is generation, therefore additional generation needs to be carried out in order to increase electrical power. In addition to an increase in the number of generation, an increase in the reliability of electric power transmission and distribution systems is also needed. One of the efforts made by PT. PLN (Persero) to improve the reliability of the transmission and distribution system is by building a SCADA system (supervisory control and data acquisition). The reliability of the SCADA system is determined by the formation of good integration between components, between the master station and the remote station and the remote station with the substation equipment that will be controlled and monitored. One part of the SCADA which is the most important device is the RTU (Remote Terminal Unit) which acts as a device needed by the control center to process data, and a series of processes for remote control when a disturbance occurs. Data communication between RTU and Master Station to be monitored by SCADA can be done directly (slave) or through the data collection process at RTU, after going through the selection, the important data sent to the Master Station can optimize to use of data communication channels.

Key word : SCADA Communication, Remote Terminal Unit (RTU), Data Control