

摘 要

由于中国经济的快速发展和能源需求的增加，能源行业不断开发新技术和新产品，特别是在发展中国家。近些年来，基于中国安全的技术得到了广泛应用概念、操作显著减少电气工作生命成本提高可靠性是最现代化的能源管理系统；对于移动系统 rgmist. 使用数据收集功能，设备管理、测量、参数及各种标志武器。

在当今社会，集成自动化在施工过程。我国目前的情况是最直接、最明显的体现计算机技术。中国技术还不够成熟，但市场需求规模很大，由于国内外同类软件价格昂贵，市场竞争特别激烈，所以我想利用自己的知识来设计和开发电力 SCADA 系统。

此外，该文件还针对 Skyda 能源系统的现状，基于我国电网的现状和四年的知识，介绍了监测和数据采集系统的建设和开发，简要介绍了很多不同终端协议的现状和展望，描述了基于故障指示窗口的解决环境。其中，它包括方案框架和执行基准。

关键词：SCADA；通讯协议；继电保护

ABSTRACT

With the rapid economic development of our country, the demand for electricity in our country is also increasing. Various power industries have also begun to innovate various new technologies, new products, especially the wide application of computer technology, so that the power equipment in the safe, efficient and reliable operation at the same time, a large number of staff engaged in electricity work intensity, greatly shorten the original maintenance period of equipment, prolong the service life, enhance the use of safety and so on. Among power systems, SCADA systems are the most widely used and technology is the most mature. It plays an important role in the motion system and can monitor and control the field operation equipment. In order to realize the functions of data acquisition, equipment control, measurement, parameter adjustment and all kinds of signal alarm, it plays an important role in the construction of substation automation. From the current situation of our country, the electric power relay insurance industry is the most direct and obvious embodiment of the application of computer technology. At present our country technology is not mature enough, but the demand is very big, because domestic and foreign similar software is expensive, the market competition is fierce, therefore I want to use the knowledge to carry on the design and the development to the electric power SCADA system.

According to the current situation of power grid in our country, this paper focuses on the development of power SCADA system. The first is to introduce the emergence and development of the SCADA system; the second is to introduce the application status and development prospect of various terminal equipment communication protocols (protocols); then to explain the MI-based programming environment and VB programming software under the windows; and then to discuss the implementation of the program structure framework and source code in more detail.

Keywords: SCADA; communication protocol; relay protection

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