

Annotation

The thesis provides for the organization of Smart Grid networks in the electric power industry from the point of view of telecommunications. In addition, depending on the low cost and availability in the Smart Grid network, Ethernet technologies are most popular , so the bandwidth of the Ethernet network, transmitted and received traffic, and so on is calculated.

In the section life safety, the requirements for labor protection and electrical safety are considered. In addition, we have determined the calculation of the organization of the electrical safety system and noise at the enterprise.

The economic part shows the cost of the necessary equipment and capital expenditures. The effectiveness of the project was also calculated.