

ANALYSIS OF ELECTRICAL COMPLEXES AND SYSTEMS IN BUILDING GREENHOUSES

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Facilities closed ground characterized by biological component - plants and process equipment that can provide certain technological requirements: temperature, humidity, carbon dioxide concentration in the air, soil temperature, light regime of plants, and so on. All specified conditions affect plants and their productivity. Electrical systems, as components of technological equipment, called up to form a management strategy as separate technological processes and manufacturing as a whole. Thus, production efficiency greatly depends on the quality of electrical systems, and more on the ability of these complexes to form energy management policy.

Keywords: a complex of electrical, energy, control

The purpose of research. To analyze the operation of electrical systems used in greenhouses under glass, to identify their weaknesses and establish requirements for process control strategies and production in general.

Today, the best greenhouse plants electrical systems used mainly foreign production with high reliability operation subject to the relevant technical requirements. However, these systems

implement traditional control strategies, namely stabilization strategies that do not take into account:

1) As plants, including the quality of the plants and, consequently, their ability to implement a given technology performance;

2) The results of the analysis of natural disturbances and use their prediction of when forming management strategies;

3) real parameters of technological regimes in greenhouse atmosphere for all its volume, where the plant, not just the site of the limited number of primary converters.

Conclusions

1. The existing structures in modern greenhouses (greenhouses) electrical structure not provide reliable information about the real value of technological parameters and modes that require develop the necessary components of such a structure.

2. Stability even on modern element base can not ensure efficient use of energy flows in buildings greenhouses. There is a need to use algorithms capable of analyzing natural disturbances, states recognizing plants and on this basis to form a management strategy that will ensure the minimization of power consumption provided that the quality of plant products will meet the demands of technology.