

CDC 658.262, 004.415

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AUTOMATED PLANNING OF THE POWER-SUPPLY SYSTEMS

During conducting of calculations of different modes of the power-supply system it's assumed in the our software product, that the scheme of any electric network consists of great number of the objects linked between itself: air and cable lines of electricity transmission, transformers, shunting reactors and reactors for limitation of current, batteries of capacitors, electric motors, etc. But on the whole the network scheme contains the limited number of types of objects. For every kind the separate table of description of object characteristic properties (parameters), and also catalogues table, in the database of certificate information is foreseen in this software product [1].

The input of information about the scheme of electric network is produced in a kind natural for an user by addition of new objects in a graphics editor, and also tasks by him necessary properties in the proper tables. Necessary units and branches of calculation equivalent circuits of objects are automatically created thus. The parameters of equivalent circuit of every object settle accounts in the software product on the basis of the set properties and certificate information which is kept in the separate file of database [2]. In the process of input communication between objects and proper units and branches of calculation circuit is constantly watched.

The generally accepted graphic image which is represented on a scheme at his addition corresponds to every object of electric network. In a scheme the abstract branches not tied to the concrete object of electric network can be present also. The necessary entity selection at his addition is produced from the list of objects of the power-supply system.

All entered information is kept in the database of calculation. For viewing and editing it's represented in different windows of screen both in tabular and in graphic presentation.

Bibliographic list

1. Куликов Д. Д. Электронный учебник: Общие принципы построения САПР технологических процессов.
2. http://www.ielectro.com.ua/news48286/index.html?fn_region=-5.