ENERGY SAVING

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Abstract: *Improving the efficiency of electricity in today's industries and enterprises and preventing existing wastages is a problem for all of us. In the use of electricity in enterprises and buildings, achieving better results at the cost of less energy consumption is also an increase in efficiency. The concepts of energy efficiency are reflected in all areas, and this article deals with the problem of economical use of electricity in some areas.*

Key words *: energy consumption, norm, individual, electricity, shop norm, industrial enterprises, energy efficiency, product, technological process, norm, comparative consumption.*

LITERATURE ANALYSIS AND METHODOLOGY Currently, the use of electricity in manufacturing plants and enterprises and its economical use helps to increase the efficiency of electricity. At this point , in order not to cause material damage to the company's account, we need to understand the normative concept of electricity consumption per unit product and electricity consumption. The comparative consumption of electric energy for the production of one product is the electric energy consumed per unit of product in the production of a certain technological process or product, and we can determine it using the following formula; d=W/A

in this verse:

W - electrical energy consumed in product production;

A - the number of manufactured products;

A power rating is an average rating, usually set by a guideline, used to check or analyze power consumption and provide incentives for energy savings . The relative consumption of electricity and the standard energy consumption indicators can be in the form of soums or gross domestic product in terms of value. Depending on the purpose of calculating the electricity consumption, it is divided into the following.

1. By term of validity (annual, quarterly, monthly, etc.);

2. By the level of installation (individual, group);

3. According to the structure of consumption (technological, general production);

Calculation of electricity consumed during product production and evaluation of its normative indicators is a technological norm. Technological standards serve to control the consumption of electrical energy consumed in a certain workshop or technological process.

Shop rate is the rate set per unit of production. The norm includes electricity consumed by the entire process, electricity consumed in the main and auxiliary technological processes, electricity used for cooling and lighting the workshop, as well as waste in the internal networks of the workshop. Shop norms are needed to predict the consumption of electrical energy consumed in this particular shop, and these norms are used in the development of plant norms in general. In general, the factory norm - one is set per product unit. This includes the electricity used for the production needs of the plant, the electricity consumption of the main and auxiliary plants, as well as the consumption of all the products in the process from the raw material to the finished product, and the waste in all electrical networks. .

When considering issues of regulation of electricity consumption of a certain enterprise, the electricity consumption of another enterprise existing in this enterprise is not taken into account. For another enterprise, depending on the type of production, the standard indicators of electricity consumption should be established again. Energy and technological factors are taken into account when determining the relative consumption indicators of electricity produced and electricity produced per unit of product. As a result of taking this factor into account, the accuracy of the calculation is increased, and when the parameters of the determined normative indicators are compared with the parameters of the established normative indicators, the error between them is achieved at a realistic level. Such a result is achieved by determining benchmarks at each stage , that is, at the general factory, general workshop, and technological stages. This structure consists of three steps. The first step represents the mother plant . All electricity consumption in the enterprise is taken into account, that is, the electricity consumption of the main and production shops, heating, cooling, all the energy consumed for their own needs, the amount of electricity waste, everything is determined and the total it is taken in proportion to the product produced by the enterprise, and thus the single standard indicator for the general enterprise is determined. This pointer is defined using the following expression:

$$D\ zav = (\ d\ sex + w\ umzav + \Diamond\ w\ pst\ ) \diagup A\ pleasure$$

It is known that the consumption of electricity in industrial enterprises is not uniform, that is, depending on the technological process, depending on the change in the demand for product production, it is constantly changing and constantly depends on several factors. . As mentioned above, taking into account such changes, including factors, will certainly increase the accuracy of the calculation in determining the normative indicators. At the second level of the regulation structure, issues of regulation of electricity consumption consumed by the shop by

the enterprise are considered, and here the main emphasis is on the demand for the shop's own needs as well as technological needs. the amount of electric energy being sold is taken into account. It is at this stage that the workshop standards for the product being produced are set and it is determined using the following expression:

$$D\ seh = (\ w\ seh + w\ side + w\ ven + w\ yord\ ) / A\ seh$$

In general, the rate of consumption of energy resources consists of the following: - consumption of auxiliary processes r - consumption of electricity in technological lines; - electrical energy consumption in devices; - electrical energy consumption for technological processes . The third step of the standardization structure is considered to be the step representing the technological processes , where the standard indicators are set for the product produced according to a certain technological process, and this is determined using the following expression:

$$D\ tex = \pi\ hi / A$$

CONCLUSION In conclusion, it can be said that based on these laws, the main goal is the rational use, transmission, distribution and, of course, economical use of the produced electricity using the available opportunities. The rational use of energy resources is the duty of each of us. Energy saving and efficiency are formed through small, simple concepts, and only if equipment working on modern digital technology enters the energy, urban planning, housing and communal systems, from industrial enterprises to small production enterprises. we will achieve an increase in economy and efficiency .

Energy crises and price changes are pushing many people to use electricity sparingly. In order to reduce these costs, first of all, it is necessary to clarify the question of what "eats up" the most electricity in our home, and if necessary, to change some of our habits.

The experts of the French Schneider Electric energy management company (a representative office in Uzbekistan operates) have compiled a list of the most energy-consuming equipment in households. In this list, heating and cooling equipment took the first place - they account for 50-70 percent of the total consumption.

"Large appliances such as air conditioners and vacuum cleaners consume a large part of household electricity consumption. The electricity consumption of such equipment can be 50-70% of the total consumption. It depends on whether the unit is a heating or cooling unit. Heating equipment requires much more energy than cooling equipment," says the company's engineer Andryus Peryavichyus. According to him, water heaters (boilers) are the second most energy-consuming equipment. If the water heated in the boiler is used for washing, washing dishes, laundry, the contribution of these costs can reach up to 12% of the annual consumption. The consumption indicators of an electric water heater are closely related to the number of family members and their thrift culture. In some cases, it reaches 400 kilowatt-hours per month

The consumption of such equipment can be reduced only through strict control. For example, you can turn on the "vacation" mode when you are not at home for a long time. It is also possible to turn off the water heater during the hours when no one is using the water.

Other equipment

On average, a washing machine accounts for 2-5% of annual consumption, a dishwasher for 2-3%, and an electric stove and oven for 8%. Naturally, the consumption of these electrical appliances depends on how much we use them. It has been proven that energy consumption can be significantly reduced by using only full loads of washing machines and dishwashers.

Computers, televisions, and gadgets are also very popular today and "eat" about 10% of our total expenses. "These devices are usually left connected to the home network and receive current even when they are not turned on," says A. Peryavichyus.

Lights and a fridge

According to average statistics, about 10-12% of total costs are spent on lighting our home. If incandescent lamps are used instead of light-emitting diode lamps, this indicator can be several times higher. When it comes to lighting, the simplest way to save electricity is to not leave lights on in rooms that no one needs.

A standard refrigerator consumes an average of 150 kilowatt-hours of energy per year. However, experts say that if the refrigerator is placed too close to the wall or corner of the room and if the air circulation is not good, if it is in a very hot room, the energy consumption will increase. "Another point is that the refrigerator works efficiently when it is filled to 3/4. For this reason, it should not be allowed to be filled with old things," says A. Peryavichyus.

In conclusion, most energy-saving solutions can be implemented quickly and easily at home and in the office. It does not require a special investment or a lot of work. First of all, we need to conduct an audit of our home (or office). Everyone, regardless of today's consumption figures, will find some surplus to save.

One more aspect should not be forgotten here. In science, there is a theory called "Behavioral economics" (one of its founders, Richard Thaler, was awarded the Nobel Prize in 2017). According to this theory, people sometimes take economically irrational actions that are contrary to their behavior. For example, he buys a subscription to a fitness club, but does not go.

It is this economic model that can be effectively used in forming the skills to be economical and responsible in the use of energy and water resources, and at least to

strictly control one's own consumption. A simple example: along with the usual dry statistics about the monthly electricity consumption that comes to your phone every month, this household uses more/less than the average consumption in its neighborhood, district and the country in a month used, this information will be a very strong incentive for any person to think and "rein" his consumption.

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