алгоритма в КМ атомных реакторов на момент ввода их в эксплуатацию (для подводных лодок – спуска на воду), можно выделить среди них потенциально опасные объекты инфраструктуры и включить их в космономический мониторинг определения кризисных дат и периодов.

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MAIN PRINCIPLES OF ENERGY SAVING IN THE AGRO-INDUSTRIAL COMPLEX

Energy saving is a multifaceted process and covers different spheres of human activity. In essence, this is a way of life of a people, a society that develops a certain psychological algorithm of behavior. The development of the economy of the republic as a sovereign state is impossible without the development of a national idea, the psychology of careful and economical use of available energy and raw materials, the use of experience gained in this area by other countries. And this is the

most important area of activity today, a resource for increasing the competitiveness of industrial production, a way to integrate the economy into the international market [1,2].

Traditionally, energy consumption is divided into three areas: electricity consumption, heat energy consumption, fuel combustion. Modern energy saving is based on three main principles (Fig. 1):

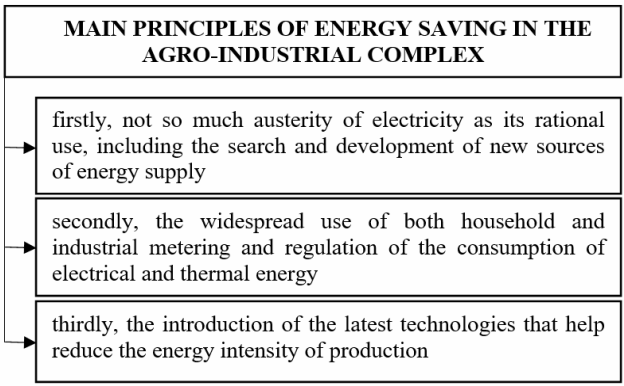

Figure 1 – Main principles of energy saving in the agro-industrial complex

Based on this, the following groups of measures ensuring effective energy use and rational use of fuel and energy resources are distinguished in energy saving: scientific and technical; organizational and economic; regulatory and technical; informational; legal [3,4].

Scientific and technical energy-saving measures are aimed at the development and use in production of new methods and devices that are characterized by high energy efficiency.

Organizational measures for energy saving are divided into organizational-mass and organizational-technical.

One of the conditions for ensuring the careful and rational use of fuel and energy, the reduction of their losses in production, is the implementation of organizational and mass work at enterprises aimed at saving fuel and energy resources. The forms and methods of this work are diverse and each specific enterprise has its own characteristics.

The main purpose of ***organizational and mass work*** is to convey to all members of the labor team the state importance of economical and careful use of fuel and energy, preventing their losses at all production sites, involving every employee of the enterprise in work on economy,

organizing the work of public organizations to identify and eliminate places of losses, finding and using economy reserves, rewarding personnel for economy and taking strict measures against fuel, thermal and electric energy burners.

The main directions of organizational and mass work on the economy of energy resources are:

• acceptance of obligations by enterprises, workshops, departments, services and individual workers and R&T on saving fuel, thermal and electrical energy;

• development and implementation of personal plans of energy workers and other categories of employees of enterprises and organizations;

• creation and organization of commissions to promote the rational use of energy;

• consideration of issues of economy of fuel and energy resources by permanent production meetings;

• improvement of technical knowledge on energy saving of certain categories of workers in schools of advanced practice organized at enterprises and organizations;

• exchange of experience with advanced enterprises of the republic and abroad;

• organization of special meetings and seminars with energy workers of enterprises, ministries and departments with the participation of research and design institutes and other organizations;

• conducting public tenders for the best proposal for fuel and energy saving;

• activation at enterprises of the development of rationalization proposals for the economy of energy resources;

• display of energy saving issues in the complex production quality management system;

• development and application of regulations on awarding personnel for saving electrical and thermal energy and using secondary energy resources;

• organizing the work of control groups to identify sources of wastefulness in the use of energy, systematically carrying out raids by them together with energy workers to check the loading of energy and technological equipment, the use of compressed air, lighting, detection of steam and hot water leaks, the presence of idling equipment, etc.

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ПОВЫШЕНИЕ БЫСТРОДЕЙСТВИЯ СЕЛЕКТИВНЫХ ЗАЩИТ

Быстродействия защиты от больших токов короткого замыкания (КЗ) осуществляется за счет добавления к существующему временному критерию селективности преднамеренным выдержкам времени на отключение, второго критерия селективности – интегральной уставки. Интегральные зависимости времени срабатывания защиты от величины тока КЗ в цепях 0,4 кВ существуют при использовании в качестве аппаратов защиты предохранителей. В качестве критерия селективности используется интегральные уставки , интеграл вышестоящего предохранителя должен быть больше интеграла отключения нижестоящего, поэтому данную систему селективной защиты условно можно назвать интегральной. Однако, в силу ряд причин, такая селективная защита не быстродействующая.