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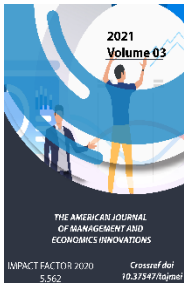

The Cost Of Calculation And Analysis In Power Generation Enterprises

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ABSTRACT

The article examines the calculation and analysis of costs in power generation enterprises, in which one of the most important quality indicators reflecting the results of economic activity of the enterprise, the feasibility of production, quality, unit of products, works, services and all sold products, the object of calculation, the unit of calculation, its types are described. At the same time, the economic elements of the cost and calculation items that make up the cost of production are disclosed on the basis of data from JSC "Fergana Thermal Power Plant".

KEYWORDS

Electricity, energy, production, thermal energy, product cost, calculation, calculation object, report, calculation method, fixed cost, additional cost, normative, step-by-step, planned, estimated.

INTRODUCTION

Energy is one of the main activities of the national economy, and the economic power of a country can be assessed according to its level of development and potential. The energy economy is significantly different from other types of economic activity of the national economy. The main types of energy products are electricity and heat. There is no production without consuming this type of energy.

If industrially produced products are first placed in a warehouse and then sold to consumers, electricity and heat will be

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consumed immediately by consumers. Today, the energy system of the Republic of Uzbekistan is a vertically integrated structure, which is managed by the Ministry of Energy of the Republic of Uzbekistan [1].

In modern conditions, the power system has a natural monopoly on the supply of energy to the service area. Currently, there are monopoly markets in the areas of electricity, gas, precious metals, mineral fertilizers, transport services, and many problems remain [2].

The existence of a monopoly is a factor that hinders competition for product sales, i.e., a possible struggle in other areas. The natural monopoly objectively leads to the need for state regulation of electricity and heat prices. As economic activity and incomes grow, so does the demand for energy resources.

THE MAIN FINDINGS AND RESULTS

It is well known that a product is anything that can satisfy a need (demand) and is offered to the market to attract attention, purchase, use, or consume. In the narrow sense, a commodity is understood as an external object, something that satisfies the needs of any human being because of its properties, in contrast to services, goods are presented in form, not in form. activity.

It should be noted that the concept of product in the energy sector is unique. First, there is no consensus that the products of energy companies are goods or services. The study of the physical properties of electricity allows us to conclude that electricity is a commodity, although it is not directly perceived as something, a thing, but affects other things, transfers their properties to them, and acquires material value. In addition, energy is recorded through metering devices and is available independently of the manufacturer.

Energy has an indirect and instantaneous commercial value that is embodied in the products of other industries or directly meets the needs of customers. The use of electricity in almost all industries and households determines its versatility. Taking into account these aspects, we would like to focus on the study of the formation of costs and the current state of cost calculation in electricity generating enterprises.

RESULTS AND DISCUSSIONS

Cost is the most important quality indicator that reflects the results of economic activity of the enterprise, the feasibility of production and the quality of management. [3] This is the primary basis for price formation and has a direct impact on the amount of profit and the level of profitability of production.

The cost of a product is the value of all direct and indirect costs incurred in producing the product. [4]

It is known that the categories of “income” and “expense” are fundamental concepts of accounting. [5]

Cost is the decrease in economic benefits during the reporting period in the form of the disposal or use of assets, as well as the occurrence of liabilities between participants that lead to a decrease in capital. [6]

Expenditures in the legislation and practice of accounting of the Republic of Uzbekistan are classified as follows:

- Costs included in the cost of production;
- Costs that are not included in the cost of production, but are included in the profit from operating activities and included in current expenses;
- Expenses on financial activity of the business entity, which are taken into account in the calculation of profit or loss from the general economic activity of the business entity;
- Emergency damages. [7]

In the practical activities of enterprises, cost is divided into two concepts: costs, production costs for the production and sale of products (I) and unit cost:

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Production cost:

1. Direct costs are costs (material costs) that are directly related to the output of the product.
2. Indirect costs are costs that are not directly related to the products produced (total workshop costs, total plant costs, management, production organization, etc.).
3. The main costs are the costs of this technological process.
4. Additional costs are the costs of management, organization of production.

The cost of the product is the most important indicator of the performance of the economic entity. The calculation of the unit cost of products, works and services and all products sold is made as a result of calculation (calculation).

Costing is a technique of analytical accounting of production costs and a procedure for calculating the cost of production. [8]

The object of calculation is the types of work and types of services for which it is necessary to have information about the products of different levels of readiness, semi-finished products and semi-finished products (parts, assemblies), their cost.

The unit of calculation is the unit of measurement for the cost calculation object. Variety of Computation Units in accounting theory have been reduced to several technological groups: natural units; conditionally natural; operational divisions; unit of time; reduced units.

Calculation is a method of grouping costs, summarizing them, calculating the cost of accounting items. The calculations are grouped according to a number of characteristics.

Table 1
Types of calculations

№	Types	Description
1.	Normative	Calculated on the basis of applicable technological standards and standards for the use of means of production and working time. It is used in production management practice as a reference, the comparison of which allows to identify ways and stocks to reduce the cost of the product, and to increase profits by reducing the cost of each type of product.
2.	Project and planning	It is based on progressive norms and standards of consumption of material, labor and other types of resources. Design and planned calculation is used in the following cases: - substantiation of the level of selling prices for certain types of products; - identify the need for specific types of material, labor and financial resources; - The results of subsequent control and comparison of the quality of production management by comparing data from design and planning and reporting calculations directly describe the losses arising from the excess of the actual cost of production design and planned cost or, conversely, additional revenue from production reduction. real production cost compared to the project and planned
3.	Planned	Formulated for mastered products, provided in the production program (annual, quarterly, monthly)
4.	Report	In addition to the purposes of comparison with data compiled and planned by accounting services, the production of various types of resources is an important tool for financial control over the rational use in this area.
5.	Estimate	It is made on a one-time basis for the product ordered or ordered

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Cost calculation method is a method of analytical accounting of production costs on the objects of cost calculation and methods of calculating cost. In order to determine the method of calculation in the organization, it is important to know the form, type and essence of production, the duration of the production process, the type and essence of the product produced. There are various classifications in the economic literature of cost accounting and cost calculation methods.

According to the most common classification, the following methods of calculating the cost of a product are distinguished.

Table 2

Classification of methods for calculating the cost of production

According to the classification feature	According to the calculation method
on the objects of cost accounting	step by step
determining costs by periods	on an order basis, periodically
unit of cost in the order of cost formation	general, single (single)
by calculation methods	direct calculation, cost addition, cost deduction, cost distribution, combination, normative

As can be seen from the data in Table 2, the cost calculation method is a method of analytical accounting of production costs and cost calculation processes for cost calculation objects. To determine the method of calculation in organizations, it is necessary to know the form, type and nature of production, the duration of the production process, the type and nature of the product produced.

Fixed costs do not depend on production volume. Typically, this consists of costs associated with the preparation, organization and management of production, depreciation payments, rent, as well as the general workshop and general plant costs of the enterprise. Of course, this should also be reflected in the calculation items.

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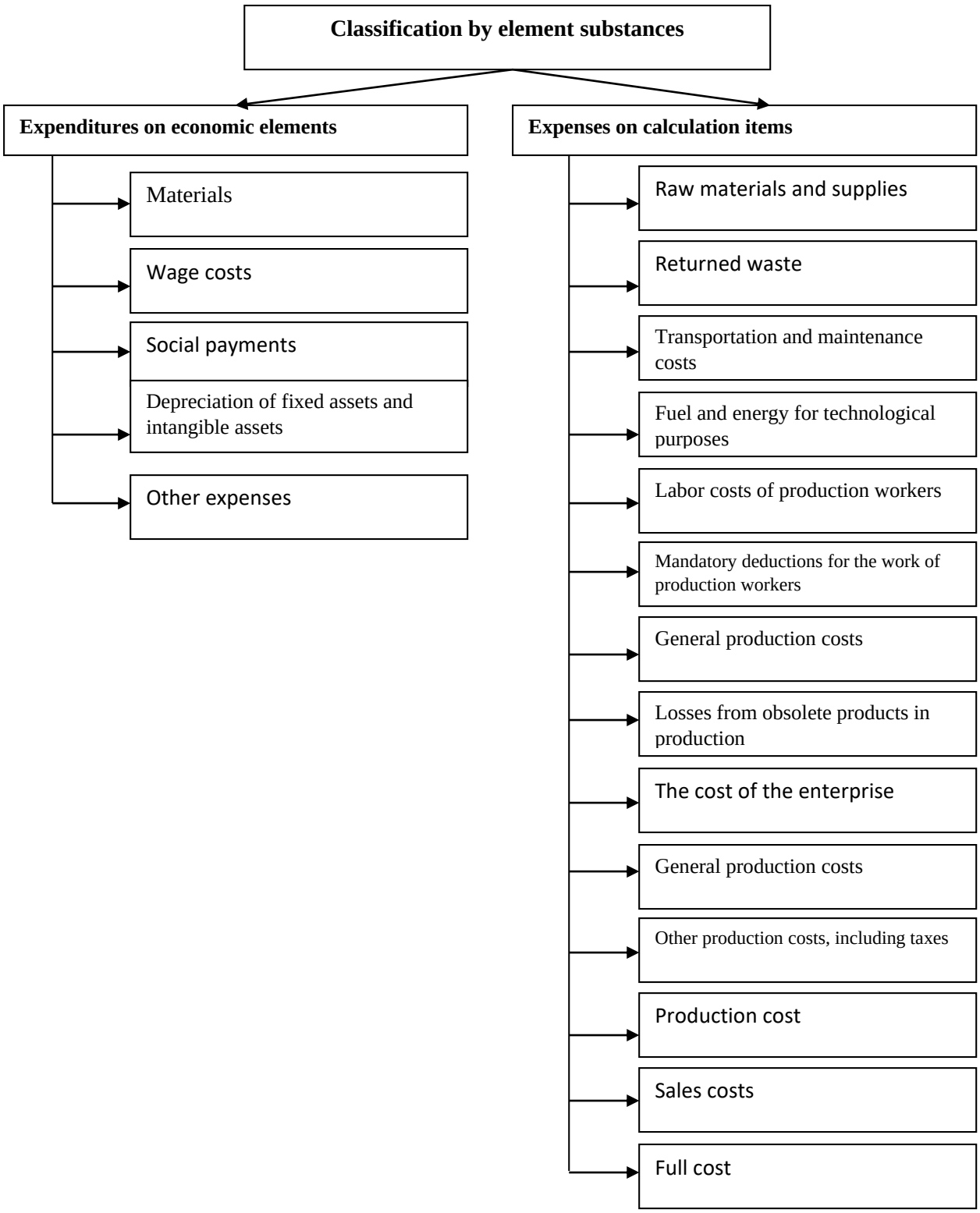

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Figure 1. Classification of costs by calculation elements and items *(Developed by the author on the basis of current accounting legislation)*

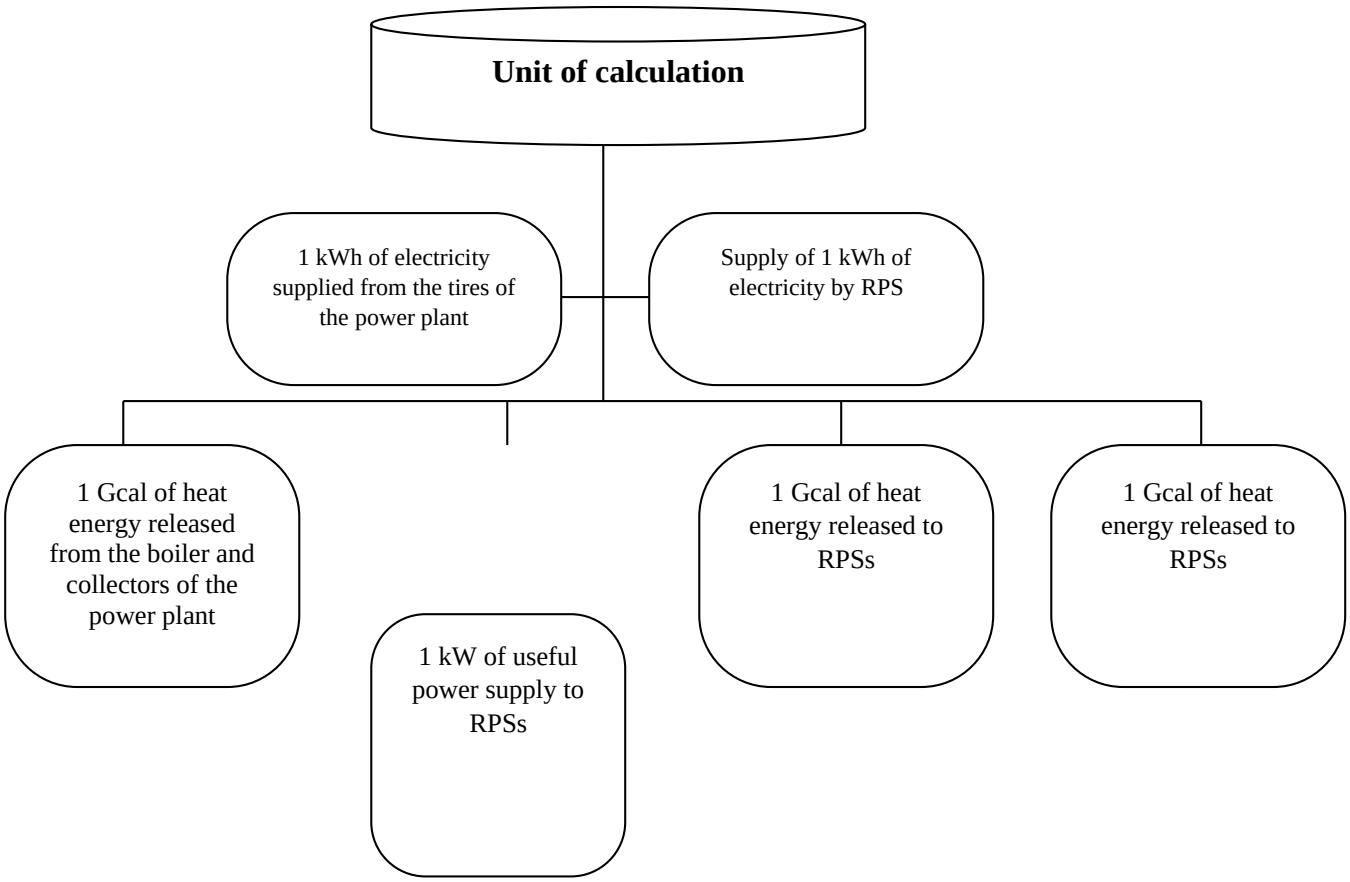

Figure 2. Types of calculation units in the energy system *(Developed by the author on the basis of information from the site http://minenergy.uz/uz/news/view/462)*

The data in Figure 2 show that the unit of calculation in electricity generating enterprises plays an important role in the formation of cost.

CONCLUSION

Currently, there are several methods of allocating costs by product type, some of which are: cost reduction principle, proportional quantification principle, price method, principle of distribution of similar products in proportion to individual production costs, energy equivalence method, exergy method, normative methods.

The fundamental differences between energy products and products of other industries in electricity generating enterprises are:

- The impact of other economic activities on the cost of all goods;
- The goods and their payment do not match in time;

- The nature of the infrastructure - it affects the macro and microeconomics, the social conditions of society, etc.;
- Impossibility to store energy in large quantities and efficiently;
- Energy is not a commodity, because all energy belongs to the common network;
- Impossibility of energy rejection;
- Technological unity and randomness of energy production, transmission, distribution and consumption processes;
- Reliability and security of supply.

The technical report currently used in Thermal Power Plants is based on the "physical" method, the essence of which is that all combined production is concerned with saving electricity, leading to an increase in thermal energy tannery.

Data on cost accounting and current status of the study of calculation items at power generating enterprises were presented.

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