

## **COSTS CONTROL IN ENERGY FIELD**

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**Abstract:** Energy has become a strategic factor in global politics, a vital component and a cost factor for economic development and progress of society overall. Given the importance of electricity, both for branches of national economy and for public welfare, the state took over the task of implementing and exploiting the energy system. The result of this action was to create mechanisms for administrative control of prices, through costs. Organizations and managers also put emphasis on cost accounting and control. Expenditure control in the past, present and future is part of the work of all managers in a company. Companies that try to make profit, focus on cost control that affect them directly. Also, knowing the costs, segmented by product is essential for making decisions on price, with further implications in the evolution of turnover.

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**Key words:** cost management, cost control, cost optimization, pricing, efficiency

### **1. INTRODUCTION**

In a context of increasingly globalization Romania's energy policy is realized in an environment of changes and developments which are taking place at national and European level. In this context Romania's energy policy must be correlated with similar documents at European level to ensure our country's policy convergence with EU policy in this area.

Power System main challenges are: demand, replacement of inefficient capacity and lifetime expired, integrating a growing share of electricity produced from renewable sources, security of supply and integration into regional and European market.

Romania has chosen the model of decentralized electricity market in which participants are free to enter into transactions of sale and purchase of electricity. However, given the strategic importance of electricity, the state has regulated the way that energy transactions should operate through the organization and regulation of markets in which to operate, in order to control prices and costs in the energy sector: the regulated and competitive market, market wholesale market including day-ahead balancing market, the centralized market of bilateral contracts, green certificates market and retail market.

### **2. STATE CONTROL MECHANISM IN ENERGY**

Since 1999, the National Energy Regulatory Authority (ANRE) has become operational and has developed and delivered the main rules for the functioning of administrative control structures: Commercial Code of the wholesale electricity market; Rules of programming and dispatching of SEN; Framework contracts for sale - purchase of

electricity and ancillary services trading, transport service and distribution service; Technical codes of networks; Regulation on licensing and approvals, approved by government decision; Rules for the accreditation of eligible consumers of electricity; Pricing methodologies and tariffs.

ANRE establishes rates and charges based on costs by operators in the generation, transmission, distribution and supply (regulated market) power.

Prices reflect justified costs, meaning that costs required by operators and accepted by ANRE to be recognized and passed to end users through tariffs account. Price revision is made by the Authority on the initiative of the economic sector. Natural monopoly activities are electricity transmission and distribution of electricity and also the supply of captive customers by electricity distribution companies.

### 3. COSTS CONTROLL IN ENERGY FIELD

Energy pricing should take into account certain principles that are not in a standardized way in all economic processes:

- efficient allocation of resources, not only between different sectors of the economy, but also in the energy sector to the effort that you require energy system ensure sufficient revenue to cover the financial needs;
- principles of fairness and equity by allocating the correct (unbiased) costs between consumers, according;
- establish a structure of electricity tariffs, simple enough to allow measurement and billing of consumption;
- consideration and other economic and political needs (providing electricity subsidies for certain economic activities or geographical areas in order to encourage their development).

Cost control, also known as cost management and management to limit costs, is a broad set of cost accounting methods and management techniques with the common goal of improving business efficiency by reducing costs, or at least limiting their growth. Companies are using cost control methods to monitor, evaluate and improve efficiency.

Planning and cost control provides two types of control mechanisms: Feedforward: providing a basis for control at the point of action (decision point) and Feedback: providing a basis for measuring the effectiveness of control after implementation.

We all face the fundamental economic problem of the allocation of scarce resources. This is a problem faced by every company, every government. In most of the world, there are institutions that facilitate the allocation of limited resources.

Below are listed methods adopted by some companies in Romania for cost reduction.

**Working with budgets** quarterly, annual or greater time periods, organized by responsibility centers, profit centers, cost centers or investment centers;

Implementation of **integrated software solution** that provides overview of companies' performance and the ability to control <<on time>> the costs; Working with integrated systems gives big advantages in terms of costs control:

Real time access to information centralized, coherent and consistent, securing access to information and restricting access according to each user reduction of time and human resources transactions and accelerating processing time for marketing; image unified, integrated system, the traceability of operations. Also, functional benefits: optimized inventory, reduction of losses generated by end goods, control of

commercial conditions for customers and suppliers, management of the area of sales, flexible reporting.

**Using ABC (Activity Based Costing)** - The concept of the method starts from the idea that there are products that consume resources but activities. After the appearance of the accounting activities, it was discovered that traditional Calculation methodology of expenditure may create significant differences in final product costs. A modern management method that allow a company to understand more clearly how and what activity or product is made profit ABC (Activity Based Costing and cost analysis activities). The principle behind this method is smoother distribution of expenditure carrier. In other words, ABC, all specific activities to achieve a product or service are identified and their expenses are calculated to achieve greater accuracy than traditional accounting methods.

**Using Direct Costing.** The direct costing method is the simplest of the three cost allocation methods. All costs are directly allocated to the operating departments, bypassing the other service departments. Hence the term direct method. Nevertheless is very effective in operational costs control in departments.

**Using Outsourcing for non-core activities.** Simply put, outsourcing is the contracting of a third party to manage a business process more effectively and efficiently than can be done in house. Outsourcing is a useful tool employed by companies across the world to cut costs, improve quality of service, and raise revenue.

Outsourcing has been used by companies in energy field to solve various problems ranging from a lack of internal expertise to a need for significant cost reductions. Many companies have found that equipment, maintenance, or labor costs for providing a service have risen faster than budgeted revenues. Other companies have found that outsourcing allows them to improve quality, by utilizing a contractor with more knowledge and expertise in providing a particular service. In these cases, some have found that the economies of scale and resulting efficiencies enjoyed by private vendors can be a solution to adopt as cost management decision.

**Using Cost Plus and Transfer Pricing Methods.** In this methods, the total price of intangible incurred by the tested parties in transferring products and services to Associated Enterprises is measured and the sum of gross profit spot used by similar enterprises in comparable transactions with self-determining associated enterprises is determined. In common, for reason of apply a cost-based method, costs are divided into three categories: direct costs:- raw materials; indirect costs:- repair and maintenance which may be allot among several goods and operating expenses:- selling, general, and organizational expenses. The cost plus method uses limits calculated after direct and indirect costs of goods. Correctly shaping cost under the cost plus method is important. Cost is typically calculated in agreement with accounting values that are usually accepted for that exacting industry in the region where the products are produced. The cost base of the deal of the associated parties to which a mark-up is to be applied be calculated in the same way and returns comparable functions, risks, and properties as the cost base of the similar transactions. Where cost is not exactly resolute in the same way, both the mark-up and the transfer will be used.

#### 4. CONCLUSIONS

Romania currently pays a discounted price of energy in the future but it is likely to increase significantly. Low price comes mainly from the fact that an energy mix with average prices of small and very small production.

Currently Romanians can choose under certain conditions, a state regulated price, unique in the European Union, called "social tariff" which has a minimum cost. Basically supplier makes a home loss with a consumer who chose this tariff for energy which he uses because the price paid by consumer does not cover production costs of energy, its transport, the distribution not to mention profit provider.

In most EU countries to work on the principle that if the industry supports easier energy costs then there will be influence on social life, such as prices of products will be lower. Countries like Denmark, Sweden and the Netherlands practice double rates for residential customers than industrial users.

First, lack of infrastructure investment to date production is one reason why prices are lower now than the future. At the moment there are power plants that use technology 30-40 years ago. They will be upgraded to continue to produce and to be more effective. Unless will be privatized, the Romanian state should invest a few million in it. The amounts will be reflected in energy prices paid by consumers. Price reductions will be seen later when costs will be amortized investments. Italy, for example, was one of the states such investment made 10 years ago and today we can see a drop in energy prices due to increased production efficiency

A component of tariffs and today is responsible for the increased cost of electricity is the "network losses." These are of two kinds: technical and commercial. The configuration related technical and commercial transport infrastructure caused by theft year. This phenomenon exists today and contribute to some extent and the price paid currently. There are regulations which require reduction targets of this phenomenon for energy distributors.

Own costs of each company supplying and distributing electric power is also an important component of total costs to be recovered by the final consumer prices.

If current energy laws and policies remain unchanged throughout the period until 2035, global energy demand will increase by almost 50% compared with 2007, which means to challenge the National Power System solutions for monitoring, control and reduction cost.

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