ROLE OF PERSONNEL SELECTION ACTIVITY IN ENSURING THE COMPETENCE OF AN ORGANIZATION WITHIN THE NATIONAL ENERGY SYSTEM

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Abstract: At the energetic units’ level is significantly felt the need to follow closely the costs, including their distribution till the job level. This leads to a new vision of using human resources, mainly based on rational considerations and less on emotional ones.

Reducing personnel number by outsourcing activities has the advantage of redundant personnel that can keep the job without professional retraining, but to a newly created unit that performs the same activities, with greater efficiency and higher productivity. Thus a series of activities within the national energy system organizations can be outsourced, process denominated as negative selection of personnel.

Utilization method of the main success factors for selection activity and fitting on position, following the restructuring and conversion activities, requires a thorough analysis on the following issues: position careful definition; defining the candidate qualities for the job, preparing the employment process and / or promotion; objectivity in selection, consistency in application of personnel policy.

However the work effectiveness of each employee to the position he occupies is directly influenced by the following factors: the works specific and tasks assigned to that position; using entirely the daily working time; effective competence on position of the employee.

JEL classification: J01, J08, M12, M21, M51, M54, O15

Key words: electrical energy, human resources, outsourcing, negative selection, Romanian National Energy Sistem, creative capacity of the employee, attitudinal side

1. NEGATIVE SELECTION, BASIC COMPETENCE OF THE PERSONNEL SELECTION PROCESS IN ORGANIZATIONS WITHIN THE NATIONAL ENERGY SYSTEM

Personnel policy of economic organizations in the energy system is felt both at the respective units’ level and at the entire national economy level.

At the energetic companies’ level is significantly felt the need to follow closely the costs, including their distribution till the job level. This leads to a new vision of using human resources, mainly based on rational considerations and less on emotional ones, type of consideration that had dominated personnel politics conception until 1989 and the first years after the revolution.

Future development of energetic system and particularly of human resources employed in this sector can not be planned by extrapolating past evolutions because the latter were produced in fundamentally different conditions of a centralized order economy. Likewise, there are no development patterns that may be copied from other countries or sectors, because the resemblances are accidental and irrelevant. Thus, an original
contribution of the local specialists is needed, but, in order to have a high chance of achievement, they must be based on predictions of the sector evolution context, that only an independent prediction studies nucleus with valuable specialists can realize.

In order to bring the number of personnel at the developed countries level, is necessary to chance the technology (reengineering), which requires a high volume of investment. To bring the personnel number at the project indicators level is required a more judicious organization of activities within the organization, related to a more intensive professional training of the personnel.

For this purpose, the negative selection, like a fundamental component of current management plays a significant role. Reducing number of personnel by outsourcing the activities is an advantage for the dismissed staff, being able to keep their job without a professional retraining, but to a newly created company that performs the same activities, with greater efficiency and higher productivity. The companies that apply for outsourcing activities have the advantage that they use employed personnel in the respective activity only when they need it, without paying their waiting period. Also, the market economy instruments allow reducing costs in the concerned activity. Emerging competition, leads on the one hand to reducing costs and on the other one to increasing services quality.

Activities that were proposed by different organizations’ leaders within the National Energy System regarding outsourcing are:

- Repairs and maintenance;
- Mechanical repair shop;
- Auto and rail transportation;
- Household fuel;
- Supplying;
- Accountancy;
- Professional training;
- Administrative household activities, etc.

**Repairs and maintenance activity** within energetic system companies is extremely useful, especially because of the quality of this activity mostly depends the safety and economics of equipment functionality.

Maintaining this activity within the economic units gives a feeling of safety-being your personnel you can appeal to him anytime, you can solve urgently an emergency situation, an unpredicted event. Experience has shown that besides positive aspect given by this safety, there is also a negative aspect of using irrationally this manpower with consequences to work productivity. Also, the complexity of installations, especially in case of using top modern technology, involves using a variety of specialists what leads to the necessity of employing a large number of personnel, but used only a small number of hours/year. The problem stated by the branch managers who consider inappropriate the repairs outsourcing, is that they don’t have a contract tool to enforce the providing units to intervene promptly in emergency situations. This obstacle will disappear by the emerging competition in the repair companies’ field and through better training of managers in the negotiation and contracting activities.

Currently, within the companies appear situations when the maintenance and repairs personnel is totally unused as well as top repairs situations when it is insufficient and is necessary to appeal to third units.

By outsourcing repair activities can move to new created repair companies to industrialization of this activity, to achieve replacement of defect components at the
beneficiary company by their repairing in the plant after putting into operation the equipment. This allows a times’ reduction of installations unavailability together with reducing repairs costs.

On the other hand, the newly created repair companies must be very flexible and not phantom company for the company that came from. This requires a mobile personnel, that serves multiple companies.

**Mechanical repair shops**, parts of energetic companies with auxiliary role, are generally used for small repairs, “patches”, are mostly an annex of repair and maintenance activity.

By outsourcing repairs activity and by industrial realization of this activity their role within the company is reduced. It is more efficient to order a piece or a detail to a specialized and organized accordingly company than to realize individual, craft products.

**Auto and rail transportation** is an auxiliary activity that proves to be inefficiently used. Providing transportation by its own means requires appropriate equipment that involves a high volume of investment. It also requires hiring a large number of personnel involved in operation and maintenance of vehicles. Their load factor is reduced. Also performing some types of limited transport makes the transport means to be inability used on the one hand because is not being loaded at optimal capacity, and on the other hand by failure to select the best traffic routes. Using specialized companies increases services quality and reduces costs on the whole activity.

**Household fuel** is an activity that during the year has a different degree of loading. Usually, on winter, when is top production for electricity and thermal energy, this activity involves using a larger number of personnel. During summer, this personnel remains unused. Many companies use this staff during summer as unqualified at repairing activity, or transfer him to technical unemployment period. Using a specialized company in carrying out the fuel relieves the energetic company of all these problems and reduces costs.

**Supplying** activity is designed to ensure the company the complete material and technical resources accordingly from a quality point of view, at minimum costs and required deadlines.

An often recently used method worldwide in achieving materials supply to companies is guaranteed supply.

Guaranteed supply, consist of taking over by a specialized trading company the supplying process from the company. Practically, the supplying activity is outsourced. This type of supplying has the following advantages:

- Reducing transportation costs by conditions that are created to develop optimal distribution plans – resources transport to served customers in formal;
- Materials stocks diminishing at the company, being possible to serve them at short intervals of time, even daily, by using the storehouses of specialized supplying companies.
- disposal the company facilities that it would have been used for storage, using them more efficiently;
- using at some moment smaller funds for purchase of material resources by avoiding the maintenance of stocks;
- relieving the company of supplying activity and focusing on solving production problems;
- Accelerating the rotation speed of circular capital (raw materials and related) of the company and thus increasing the economic efficiency.
Guaranteed supply system involves the establishment, at an organization level, of supplying programs and its records, the actual supply being made by a specialized company.

To this end the organization will develop the following activities:

- Preparing predictions regarding necessary materials for the branch offices.
- Sizing safety minimal stock for any disturbances and unpredictable situations;
- Developing a detailed supply plan and programs;
- Negotiation and contracting the entire supplying activity with a specialized company.
- Follows the stage of ensuring material resources and intentions and disturbances in consumption;
- Aims framing in specific consumption;
- Provides quality and quantity reception;

This system has the advantage of a rational use of human resources, of storage facilities and financial resources of the company but presents the disadvantage of unforeseen events risk.

A properly organized supply provides a competitive advantage to the company by improving availability, quality, delivery and total cost.

The advantage of decentralized supply to the central one is the possibility of achieving a faster, better and cheaper circulation of information and in terms of appealing to guaranteed supply, even of materials.

The success of supplying system is based on prevention activity developed by the interoperable supply team, on the way they manage to correlate the general objectives of the organization referring to quality, production time and total costs with supplying daily activities.

Linking mechanism is to promote partnerships with suppliers and establish a creative supply agreement, which can be achieved by using highly specialized companies.

Accountancy can be also added at the type activities presented above. Lately more and more companies are using specialized accounting, especially because of the advantages of computer systems, interconnected.

2. Personnel selection and evaluation methods specific to the current situation within National Energy System

2.1. Rational fundament of personnel policy within the energy market evolution on global level

Contemporary global society is facing an increasingly reduction of resources. In practice, currently, none activity can have unlimited or sufficient resources, but at least limited resources.

In a competitive market, position, success and stability of a trading society depends basically on how limited resources at their disposal are valued, namely the financial, information, technical materials, energy and human resources. Central objective is to develop an efficient economic activity, meaning to achieve an established profit from marketing the products they manufacture and / or services they provide.

It is also the case of 4 companies divided from CONEL, meaning Transelectrica, Termoelectrica, Hidroelectrica, Electrica to which we add Nuclearelectrica Company.
In order to have an efficient activity of the company, the profitability level should be harmoniously correlated with the level of using limited resources available.

Human resources are the most valuable, the way in which each employee works daily in the position he holds, depends the efficiency of other resources.

An activity started in less favourable conditions can become in a relatively short time a profitable activity, unless the company has a valuable personnel, rational and complex reasoned fitted on a position, organizational structure compartments are dimensioned in accordance with the required product on the competitive market and offers a work environment "focused on performance."

An activity begun under favourable conditions can become in a relatively short time an unprofitable activity if it does not have a valuable personnel and there is no concern of rational efficiency of creative potential of employees and their complex motivation, according to the certain position competence of each employee.

These findings, validated by the economic practice, confirm the special importance of rational foundation of personnel policy and the special attention, continuous, to be given to testing activities, guidance on post employment, professional training in advance of the introduction of technical and technological progress, complex motivation and promoting company employees in accordance with the effective competence on position of each employee.

The same permanent concern should be given to selection activities, testing, guidance and employment of persons on the labour market, while the environment is conducive to development of economic activities.

It is necessary to pay a special attention to designing the organizational structure of the commercial companies (characterized by high flexibility and reduced operational costs), rational sizing of each compartment, rational distribution of tasks for each position, aiming to use the full creation capacity of the position occupant, as well as the efficient use of its daily working time.

During the same management team that leads a company, it should define scope, mission, strategies and tactics for economic development of the company.

This is reflected in the global objectives and specific objectives (by functions) that are divided afterwards in departments, sections and work positions.

By this targets structure results the "general architecture" of the company's organizational structure that follows to determine:

- Types and number of departments and/or sections;
- Type and number of positions for each section;
- Hierarchical levels;
- Hierarchical weight (coefficients of employment);
- Relationships (links).

The position represents the basic subdivision of organizational structure that includes all works and/or tasks given to be executed by an employee and necessary performances to be obtained in their achievement.

Defining position involves specifying the competences, authority and responsibility of the position occupant.

2.2. Selection process and position fitting of the employee

The selection and fitting on position the employees process aims to identify the best people available for various departments and positions within it. In the case of Transelectrica, Termoelectrica, Hidroelectrica, Electrica companies, those persons
available are dismissed and prepared for the new position by retraining activity. Utilization method of the main success factors for selection activity and fitting on position, as a consequence of dismissal and retraining activity, model adopted by companies like Transelectrica, Termoelectrica, Hidroelectrica, Electrica, requires a thorough analysis on the following issues:

- position careful definition;
- defining the candidate qualities for the job;
- preparing the employment process and / or promotion;
- objectivity in selection;
- consistency in application of personnel policy

Achieving high quality of works and/or tasks assigned to a position is directly influenced by “three vectors” equipotential as importance namely:

![Figure no. 1](image)

V1 $\equiv$ C.C.A.  
V2 $\equiv$ L.A.A.  
V3 $\equiv$ C.N.P.

V1, V2, V3 - Equipotential vectors in achieving high quality of the tasks position;  
C.C.A. - Creative capacity of the employee;  
L.A.A. - Attitudinal side;  
C.N.P. – Position necessary competence assumed by the employee

Equipotential vectors to achieve high quality of the position tasks:

- Professional training of employee entrusted with the position (V1), respectively all technical information, technological, managerial, economic, public relations, etc., of it, that he uses in carrying out quality (performance level set) of position tasks, without appealing to consulting specialized materials or consulting employees of the company more experienced in that activity. All this knowledge define "creative capacity" of the company employee;
- Employee behavior and behavioral changes to position tasks embodied in: the conscious participation in various activities, leadership, responsibility assumed in carrying in time and at the established performances for the position tasks, etc. (They define the attitude of the employee - V2 = LAA);
- Necessary competence required by position assumed by the employee when fitted on position. Granted competence (V3=C.N.P.) refers to all technical, technological, managerial, economic knowledge, necessary for achieving, at an established performances level, the position tasks and responsibilities that the position occupant has to consciously assume.
- The first two vectors (V1=C.C.A and V2=L.A.A.) define the “effective competence on position” of the company employee.
2.3. Factors influencing the effectiveness of each employee's work

However, the work effectiveness of each employee to the position he occupies is directly influenced by the following factors:

- the works specific and tasks assigned to that position;
- using entirely the daily working time;
- effective competence on position of the employee.

The works specific and/or assigned tasks to a position permits to establish:
- positions recommended to hire male persons;
- positions recommended to hire female persons;
- positions where can be hired both male and female persons.

Example of knowing the specific of tasks assigned to a position under conditions of a specific activity from Termoelectrica, Transelectrica, Hidroelectrica, Electrica allows to determine:

- level of professional training of the employee that receives the position (higher education, medium, etc.);
- minimal experience needed in the field;
- maximal age recommended at the employment time.

Achieving general objectives and activity areas of the company, at the established performance level, also requires full use of daily working time of each employee. Achieving this objective involves determining the time in which each work can be completed and / or position assigned task, at the performance level established in accordance with the concrete conditions in which the company operates. On this basis is established and then used completely the daily working time of the position occupant.

At the operational positions level (human - technical equipment) from production departments is recommended to elaborate detailed analysis graphics of working process (human-machine scheme) which provides a particular work. Elaborating these graphics requires work breakdown process in its component operations following strictly the order, the sequence and interdependence of these operations.

The working process is divided in:

- actual operations;
- technical quality control;
- transportation;
- expectations;
- storing.

Proposed improved methods have to ensure increasing weight of proper operations and of technical control (which improves the economic effect in working process) and reducing the weight of transport operations, expectations and storage (which increases the economic effort) in the total time the respective work is achieved.

Applying this method can be extended to other positions within the organizational structure of the company. The above method is recommended for positions that include works and / or tasks with a lower degree of complexity and repeated several times in the daily working time of the company’s employee.
For positions that include tasks with a very high degree of complexity and a low or very low degree of repeatability on a large period of times (eg Department of Planning, Research and Development) are accepted principles and calculating relations used in methods PERT\(^1\) (Program Evaluation and Review Technique), for determining the duration of achieving a task assigned to the position (ex. cost an price provisional calculation for the constructive project and technological project requested by a client).

In such situations it is necessary to divide the position tasks in component operations in strictly compliance with order, sequence and interdependencies between them.

For each operation are three estimates of achievement duration:

- optimistic duration\(a_{ij}\)- minimal duration of finishing the operation “ij”, in case of most favorable set of circumstances;
- most probable duration \(m_{ij}\) of finishing the operation "ij" with the greatest chance of achieving normal working conditions;
- pessimistic duration \(b_{ij}\) of finishing the operation "ij" appears when the worst set of circumstances, excluding the very unusual circumstances.

Based on these three estimates is calculated the average and duration dispersion of "ij" operation with the following relations:

\[
t_{ij} = \frac{(a_{ij} + b_{ij} + 4m_{ij})}{6} \text{ and } s_{ij} = \left[\frac{(b_{ij} - a_{ij})}{6}\right]^{2}
\]

Dispersion \(s_{ij}\) is a "measure" of the degree of uncertainty in estimating the duration of activity "ij" under which it accepts or not the average duration of accomplishing the operation \(t_{ij}\).

On this basis is established then the duration of completing the position task that is analyzed with the greatest chance of achievement. For such positions is extremely difficult to determine whether to use full time working day of the position occupant.

A rational use of time of the position occupant can be observed during longer periods of time (decade, month, quarter).

Such estimates can be made for positions at higher levels of the company's organizational structure - "top managers". This involves the observation time of top managers and finally using those models used for full time working day.

**Efficient competence on position,** is a central element in description foundation of the position, being given by overlapping area between “efficient intrinsic competence” of the position occupant \((V1+V2)\) and “assumed competence” in the moment the person occupies his position\((V3)\).

The economic activity of the company can meet the following conditions:

Case a) – the company employee was not properly fitted on position, its effective competence on position is low, the results of work will be modest, some of the tasks assigned to the position can not be accomplished within the deadlines and at established performances.

Case b) – represents the "ideal case". The employee was properly fitted on position, its effective competence on position is maximum, the work results are very good, all tasks assigned to the position are accomplished within the deadlines and at established performances.

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\(^1\) PERT method (Program Evaluation and Review Technique) uses three periods of time associated to each activity (optimist, pessimist and the most probable) using a weighted average presenting the estimated period. The main purpose of using PERT method is represented by the correct identification of critical activities and providing certain information to the manager.
performances. The position occupant is complex used at „its effective intrinsic capacity" and at full time daily work. This case represents the goal to be achieved by managers of organizational structure sections of the company.

Case c) - the company employee was not properly fitted on position, its "effective intrinsic competence" exceeds for far the competence granted at the employment, moment. Although the work results are very good, the position occupant is slightly requested and the daily work time is partly used. In such situations it is necessary to "promote employee” so as to reach the situation presented in the case of b).

Effective competence on position is the only rational criterion in personnel policy basis adopted by the companies and hence by the National Energy System companies. Elaborating the final structure of the position involves formulating answers to the next questions:

- Who? - Defines the effective intrinsic competence of the person who is rationally chosen for the given position.
- Who else? - Identifies the tasks position that can make the object of "delegated authority" and practical directions that use entirely the daily work time of position occupant
- Where? - Determines the "geographical focus" of the position (department, section, technological lines, etc.).
- What? - Determines the works and / or tasks assigned to the job.
- When? – Identifies the moments in the daily working time when starting and ending works and / or tasks assigned to the position.
- Why? - It shows how rational organization of work process and the possibilities of a complex motivation of the position occupant in direct accordance with its reaction “amplitude” to the application of various incentives.
- How? – It shows how applied work methods in operating works and/or position tasks.
- How? - The established „performances" are shown in operating works and / or position tasks.

"Key” elements to present a position are:

- Position denomination;
- Brief description;
- Position in the organizational structure;
- Work and / or tasks, frequency and required performances to be achieved.

The productivity of industrial organizations is generally a function of at least three variables: capital, technology and human resources.

While capital or technological performances growth can be measured by traditional accounting (profit and costs), the influence of human resources can be determined either by using traditional criteria like: attendance, turnover, accidents, labor disputes, or by observation of the direct manager, colleagues, subordinates referring on the frequency with which employees perform those activities conducive to perform properly the their assigned tasks.

An inefficient behavior of employees, such as delays, can lead to large losses for the organization they belong. Therefore the managers can and should influence what their employees do. However, most organizations are little concerned to have a coherent approach of developing an effective human resources system.
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