http : //www.cigre.org

2018 Paris Session

B3 Substations
PS 2: Evolution in substation management

Organization of the service in the power industry (example of Federal Grid Company of Unified Energy System)

Y.V. ZHILKINA, A.M EPIFANOV
Federal Grid Company of Unified Energy System, Moscow, Russia
E-mail: zhilkina-yv@fsk-ees.ru

Abstract

This work is devoted to research in the field service organization in the power industry. In the modern world, in conditions of constant transformation and development and technological progress, the use of the know-how technology contributes to the specialization and separation of service markets in the economy. The paper considers the main models of service in PJSC «FGC UES».

Key words: power industry, the service, model of the service, mechanism of the market.

The report describes the basic definitions of «service». The analysis of maintenance in the power industry allows identifying and systematizing the most relevant benefits and risks in the implementation of service activities in modern Russia conditions for customers of the service, and for service companies. The service company acts as the guarantor of achieving cost savings, both monetary and in-kind, as payment for the contractor's services depends directly on the results obtained. Thus, the transition service allows you to reduce costs and to ensure their maximum efficiency.

The study revealed that the organization of efficient service in the electricity sector the necessary balance of interests of all market actors, and to ensure competitiveness required structuring the process of interaction between energy companies and service organizations.

Table

The division of interests between the Customer and the Contractor

Power grid (energy)company	*Service organization*
• minimization of expenses for service; • high quality service (or a level of quality that ensures the reliable operation of equipment); • long-term relationships with manufacturers; • high competence of the staff; • speed of service.	• high demand for services; • low cost, high return; • long-term relationships with customers; • growth of the market.

The report examines the experience of implementation of the service model in the power sector, on the example of PJSC «FGC UES». Experience in implementation of the service model, aimed at improving the quality and efficiency of maintenance and repair in terms of cost optimization is one of the most important areas of activity for PJSC «FGC

UES», achieved a positive effect. The results obtained in the implementation of the concept of service equipment of PJSC «FGC UES»:

- extension of warranty issued by the manufacturer;
- ensuring the participation of manufacturers of the main equipment in the maintenance of its normative status throughout the life cycle;
- the presence of close to the UNEG facilities warehouses needed emergency supplies, taking into account the recommendations of manufacturers of equipment;
- the minimum deadline for the elimination of faults due to the availability of the necessary resources (qualified personnel and warehouses of the emergency reserve) and the guaranteed services of the chief-engineer of the manufacturer;
- improving the competence and qualifications of its own maintenance personnel.

The main results of the research.

1. Definition of «service».
2. Formulated benefits and risks from the implementation of service activities (service).
3. Structured in the interests of energy companies and service organizations, taking into account the modern condition of electric power industry, the basic requirements to the service activity, its potential, and maintain a balance of interests of market actors (commercial, reliability, and energy efficiency).
4. Developed and approved model (long-term) maintenance of electrical equipment, allowing the classification of services and organize the structure of service activities at PJSC «FGC UES».