

CONDITIONS OF EMPLOYMENT IN THE BRANCH OF TRANSPORT CONSTANȚA

VIRGINIA MARINA¹

National Company of Transport of the Electric Energy Transelectric, Transport Branch Constanța

Keywords: electricity,
Fixed Asset
Management

Abstract: The transmission system services have been completely separated from the production, distribution and supply. National Company of Electricity Transmission - TRANSELECTRICA SA: is the transmission system operator in Romania, with a key role on the national and regional electricity transmission grid and ensure manages and operates exchanges between the countries of Central and Eastern Europe, as a member of the Union for the Coordination of Transmission of Electricity (UCTE) and the European Association of Transmission and System Operators, ETSO (European Transmission System Operators), is responsible for electricity transmission, system and market operation, safety SEN. Also, always balancing energy supply and demand.

Cuvinte cheie:
electricitate,
managementul
activelor fixe

Rezumat: Serviciile de transport și de sistem au fost complet separate de activitățile de producție, distribuție și furnizare. Compania Națională de Transport a Energiei Electrice - CNTEE TRANSELECTRICA SA: este operatorul de transport și de sistem din România, cu un rol cheie pe piața națională și regională de energie electrică; administrează și operează RET și asigură schimburile între țările Europei Centrale și de Răsărit, în calitate de membru al Uniunii pentru Coordonarea Transportului de Electricitate (UCTE) și al Asociației Europene a Operatorilor de Transport și de Sistem - ETSO (European Transmission System Operators); este responsabilă pentru transportul energiei electrice, funcționarea sistemului și a pieței, siguranța SEN. De asemenea, echilibrează permanent oferta cu cererea de energie.

SCIENTIFIC ARTICLE OF THEORETIC PREDOMINANCE

SEPS TRANSELECTRICA has been established according to GD no. 627/31 July 2000, following the dissolution of the former National Electricity Company (CONEL) into independent entities:

- Termoelectrica, Hidroelectrica and Nuclearelectrica - production;
- Electrical - distribution and supply;
- SEPS - transport and dispatching.

Thus, "From a technical standpoint is unified energy system and administration is done by a single operator - TRANSELECTRICA SA."

The company operates according to the Energy Law and secondary legislation, mainly licenses Transmission and System Operator, Electric Network Transport Code, Commercial Code and Metering Code.

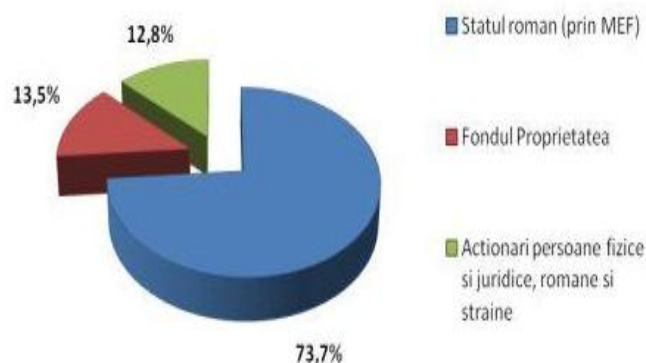
Field of activity

National Company of Electricity Transmission - TRANSELECTRICA SA:

- The transmission system operator in Romania, with a key role on the national and regional electricity
- manages and operates the transmission grid and make trade between countries of Central and Eastern Europe, as a member of the Union for the Coordination of Transmission of Electricity (UCTE) and the European Association of Transmission and System Operators, ETSO (European Transmission System Operators);
- is responsible for electricity transmission, system and

market operation, safety SEN. Also, always balancing energy supply and demand.

Figure no. 1. Shareholding structure SEPS TRANSELECTRICA on November 1, 2007



Features

The main functions of SEPS:

- The transmission system of SEN;
- Grid infrastructure;
- dispatching infrastructure (EMS / SCADA - Energy Management System / Supervisory Control and Data Acquisition);
- Allocation of interconnection capacity lines;
- Balancing Market Operator (OPE);
- balancing market platform;

¹Corresponding Author: Virginia Marina, National Company of the Transport Electric Energy and Transelectrica, Transport Branch Constanța, 195 A, Bulevardul Alexandru Lapușneanu street, Constanța, România; e-mail: virginiamarina02@yahoo.com; tel +40-0723722103
Article received on 12.11.2010 and accepted for publication on 03.01.2011
ACTA MEDICA TRANSILVANICA June 2011; 2(2) 330-332

Activities

The main activities of SEPS:

- electricity transmission service;
- technical and operational management of the power system to ensure its safe and stable operation;
- Operation, maintenance and development of its assets;
- SEN Development Planning and RET;
- Managing energy market through its subsidiary OPCOM judicial independence;
- Management and transits of electricity interconnections with neighboring countries;
- Transelectrica no electricity trades with a single exception
- the amount required to balance their loss of transport activity.

Active Management

TRANSELECTRICA management pays particular attention to fixed assets owned by the company, other than telecommunications and IT.

- 77 high voltage electrical substations, of which:

Table no. 1. High voltage power stations Transelectrica heritage.

Voltage [kV]	750	400	220
Number of stations	1	32	44

8,955 km of overhead lines (OHL), of which:

Table no. 2. Length of overhead lines (OHL) SEPS Transelectrica Heritage

Voltage(kV)	750	400	220	110 *
Full length overhead lines (km)	155	4.630	4132	38

Table. 3. Interconnection lines to neighboring systems (equipment, of which 135 major processing units (UPT) - totaling 34,525 MVA)

Voltage(kV)	750/400	400/220 /MT *	400/110/ MT *	220/110/ MT *
Number of UPT	2	22	22	89

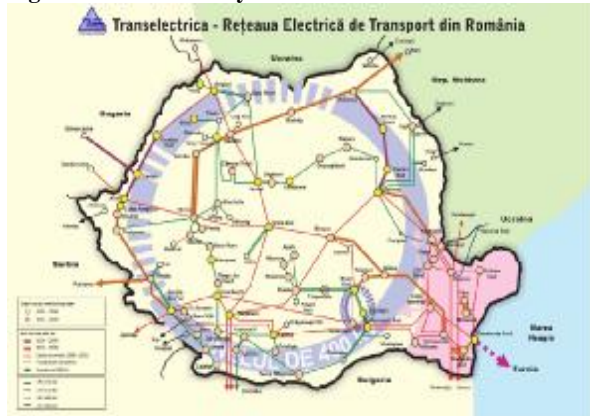
UPT Transelectrica heritage.

* Medium voltage (MV).

Structure Executive Offices:

- SEPS Transelectrica is composed of eight branches of Transport (ST), the main business and Branch Management OMEPA RET
- Measurement operator of the Wholesale Energy Market

Figure no. 2. Electricity transmission network in Romania



Source: www. Transelectrica.ro

A. Transmission of electricity:

Transport activity is carried out through profile of eight branches, with headquarters in Bucharest, Bacau, Cluj, Craiova, Constanta, Pitesti, Sibiu, respectively, Timisoara. This service consists primarily of providing the transport of electricity between two or more points in the RET, the conditions prescribed by the rules of continuity, security and quality applicable. SEPS granted access to RET in a transparent, non-discriminatory and balanced manner to all market participants.

The amount of electricity that made the bus service is introduced in some nodes of RET and fully extracted from other nodes. Energy is required to cover losses RET SEPS, who must purchase their own cost on the wholesale market at prices regulated by ANRE.

The main customers of TRANSELECTRICA for electricity transmission service:

- companies producing electricity;
- SC Electrica SA, a supplier to final consumers;
- distribution companies and electricity supply derived from the Electric;
- other licensed electricity suppliers ANRE
- eligible consumers.

Share SEPS Transelectrica customers for transmission service in 2007 is shown in Fig. 1

B. Management by the dispatcher of the RPS Service System:

- Service System management is provided by the company dispatcher SEN safe operation and compliance with quality standards specified in the Technical Code of RET.
- SEPS provides this service under a regulated tariff, which applies to electricity purchased from suppliers / eligible.
- Revenues generated by the system service tariff are intended to cover the following cost categories:
- Costs related to technological system services;
- Purchase costs for ancillary services functional.

Technological system services are purchased under contract from the manufacturers, at the request of SEPS to maintain levels of reliability and power quality SEN carried out according to the rules in force.

The main components of the technological system services:

- Reserve for primary control;
- Reserve for the secondary frequency-power control;
- Reserve power for the tertiary;
- Tertiary reserve power for slow;
- Voltage control using reactive power;
- The capability to restart the NPS;
- Active energy losses RET.

Functional system services relate to the driving task dispatcher (National Power Dispatcher - DEN and Territorial Power Dispatcher - 5 DET's) the operation of the RPS, as well as other activities provided by SEPS in order to balance real-time production electricity consumption.

To achieve these internal services company allocates its resources consisting of:

- Human resources;
- Infrastructure management by dispatcher of the SEN: the system consists of EMS / SCADA (Energy Management System / Supervisory Control And Data Acquisition) and telecommunications systems and remote electrical stations;
- Covering trade uncommitted.

SEPS also buy, information technology and telecommunications services from its subsidiary Teletrans in order to maintain the optimum parameters of the systems provided, including associated communications lines.

Justified costs of these resources are covered by a regulated rate tariff functional system services - as well as functional services.

C. Administration of the electricity market:

- Management service company providing wholesale energy market through its subsidiary OPCOM, operating from 1 July 2005 as a power exchange and whose main activity is the administration of such markets by:
- Providing participants in the regulated electricity trading platform for physical the next day and closing pricing for each time slot the following day, ensuring the functioning power exchange;
- day-ahead market settlement;
- balancing market settlement;
- Green Certificates trading;
- trading contracts of sale / purchase of electricity.

BIBLIOGRAPHY

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