

ORDER no. 87 from December 4th 2013

regarding the approval the Methodology for setting fees for system services

ISSUER: THE ROMANIAN ENERGY REGULATORY AUTHORITY

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Considering the dispositions of art. 75 para. (1) b), art. 76 para. (1) and (3) and of [art. 79 para. \(3\) of the Law on electricity and natural gas no. 123/2012](#), under the provisions of art. 5 para. (1) b) and para. (5) and of [art. 9 para. \(1\) c\) from the government emergency Ordinance no. 33/2007](#) regarding the organization and functioning of the Romanian Energy Regulatory Authority, approved with amendments under the [Law no. 160/2012](#),

the Chairman of the Romanian Energy Regulatory Authority issues the following order.

ART. 1

The methodology for establishing fees for system services set out in the annex part of the present order is approved.

ART. 2

Undertakings of the electrical energy field that carry out the provisions of this Order, and organizational entities within the Romanian Energy Regulatory Authority pursue compliance of this order.

ART. 3

The entry into force of this order is repealed the [Order of the Chairman of the Romanian Energy Regulatory Authority no. 20/2007](#) approving the Methodology for setting the fees for system services, published in the Official Gazette of Romania, Part I, no. 507 of 30 July 2007, as amended

ART. 4

This order is published in the Official Gazette of Romania, Part I, and enters into force on 16 December 2013.

The Chairman of the Romanian Energy Regulatory Authority,
Niculae Havrileț

Bucharest, December 4th 2013.

NO. 87.

ANNEX

METHODOLOGY

for setting the fees for system services

CAP. I

General dispositions

SECTION 1

Purpose, scope and definitions

ART. 1

This methodology regulates the determination of regulated revenue of the transmission and system operators (TSOs) needed to make the system service, the calculation of the fee for system service and the fees for functional System services (SFS), and the principles on pricing of regulated procurement of ancillary services (STS).

ART. 2

This methodology is used by:

- OTS, for calculating regulated revenues, the service fee and system for SFS fee;
- electricity producers providers for STS, to base the calculation of fees for the supply of STS;
- ANRE for verification and approval of these rates for a fee.

ART. 3

- Terms used in this methodology defined in the [Law on electricity and natural gas no. 123/2012](#).
- For the purposes of this methodology, the following terms have the following meanings:

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The competent authority	The Romanian Energy Regulatory Authority (ANRE)
Regulatory active base (BAR)	The net book value of fixed assets, tangible and intangible assets recognized by the competent authority, which contributes to service delivery
Operational command	The dispatching management component of National Power System (SEN), which is performed in real-time prioritized by the command staff in dispatch centers operational, safe and economical functionality of the equipment and facilities of SEN
Dispatcher management SEN	The electricity sector specific activity exercised by specialized units called dispatch centers that

	have hierarchical authority relations between them and the participants in the electricity market. These relationships are distinct from administrative ones.
Operational management	Consists of operational programming and operational command
Dispatchable consumer	The consumer, in accordance with contractual arrangements, reduce their charge or is interrupted either by direct action of OTS, either through consumer action, at the request of OTS.
Congestions (network restrictions)	Operating situations where energy transport between (two network nodes or areas of system failure leads to restrictions) safe operating parameters of NPS, being necessary to depart from the order of merit of dispatchable units (redispatching)
ENTSO-E	The European Network of Transmission System Operators for Electricity
Tariff period	Period t in which tariffs are applied are approved by the competent authority; it's one year and begins on 1 July each year.
Operational planning	Activity planning by a dispatcher center, within its governing authority through dispatch on different time horizons - annual, quarterly, monthly, mode of production-consumption balance off, the operation of the grid schemes etc.
Operational programming	The activity consisting of programming on a time horizon of one week by the OTS scheme of operation of the electricity transmission network (RET) and the network of 110 kV of its decision of authority on how to balance off the production-consumption
Inflation Rate (RI)	Regulated rate of inflation, expressed as a percentage, determined in accordance with this methodology, based on the growth index of consumer prices
Regulated rate of return (RRR)	BAR regulated yield, expressed as a percentage fixed by the competent authority on the basis of weighted average cost of capital
Primary frequency control	Automatic and fast adjustment (time <30 seconds) of the active power of generating units under the action of its own speed regulators in order to maintain the balance between production and consumption at a frequency close to the value of instruction, ensuring network security production partners on the principle of solidarity
Frequency-power secondary control	Automatic and centralized active power regulation of designated generating groups in order to bring back the balance SEN frequency and values of instruction in maximum 15 minutes
Return on regulated asset base (RBAR)	Weighted average cost of equity and borrowed, calculated before tax, reflecting proportions of equity and borrowed capital of a company total. RBAR is determined by multiplying RRR with BAR
Primary adjustment reserve	Reserve that must be mobilized and fully automatically within 30 seconds to a quasi-frequency deviation of ± 200 mHz from the value of confinement, and must remain functional for a period of 15 minutes if the deviation is maintained.
Secondary adjustment reserve	Power reserve, of frequency deviation and / or SEN balance of the value of instruction, can be automatically mobilized within 15 minutes
Fast tertiary adjustment reserve ("minute" reserve)	Power reserve which is designed to ensure scheduled rapid restoration (maximum 15 minutes) to the secondary control reserve and to participate in frequency control and balance of SEN
Slow tertiary adjustment reserve	Reserve power generating units with a set time of less than 7 hours to start and load the charge
Service system	Service provided by OTS to maintain the safe operation of

	power system and power quality, according to regulations
Functional service system (SFS)	Component of the system service provided by OTS, expressing its current activity. It has a kind of monopoly
Technological system service (STS)	Service provided by manufacturers or dispatchable end customers at the request of OTS to maintain the safe operation of the SEN, and the quality of electricity transmitted to the parameters of the rules in force

ST

SECTION 2

The features of the system

ART. 4

TSO provides service to all clients connected to the NPS system. By service system ensures:

- a) safe operation of the NPS;
- b) the effective functioning of the energy market;
- c) maintain at all times the normal parameters of electricity to all market participants;
- d) RPS restoration after a total collapse or zone.

ART. 5

For carrying out the system service, TSO uses:

- a) own resources consisting of SFS they provide using specific technical competence and resources;
- b) resources acquired from other participants in the electricity market consisting of STS.

ART. 6

SFS are intended to ensure the dispatcher management of the NPS, which includes the following functions:

- a) operational planning;
- b) operational management.

ART. 7

STS are used by the TSO in order to ensure:

- a) a compensation of load variation in SEN, respectively adjusting the frequency and balance SEN;
- b) compensation differences from the program of the NES, maintenance of active power reserve capacity;
- c) adjusting the tensions in RET;
- d) RPS restoration after a total collapse or zone.

ART. 8

STS are made with the following means:

- a) systems for primary frequency control;
- b) secondary control system for centralized and automated frequency-power;
- c) tertiary power reserves;
- d) local voltage control systems;
- e) automatic containment systems on its services and self-starting groups to restore RPS after a total or zone collapse;
- f) portfolio of dispatchable consumers who may disconnect or reduce the load to the OTS.

SECTION 3

Principles and Rules

ART. 9

(1) The regulated revenue for each period related to the system services fee is determined prior to the commencement of that period.

(2) The regulated revenue related to a taxable period t is corrected based on the data made / estimated, as applicable, corresponding to the tariff periods $t-2$ / $t-1$.

ART. 10

(1) The principles underlying the rates for system service are:

- a) non-discriminatory treatment for all customers;
- b) taking into account when setting a regulated revenue of justified costs .

(2) In determining the regulated revenue, the competent authority considers revenues for the period requested by the TSO fee t , taking into account:

- a) the evolution of the electricity taken from the network (excluding energy exported), expected and justified by the TSO;
- b) investment plan for system service;
- c) RRR applied BAR used for system service;
- d) acquisition costs realized during STS tariff $t-2$ / $t-1$;
- e) ensuring the financial viability of the TSO;
- f) costs of integration of SEN power plants;
- g) costs of dispatching management of the NPS;
- h) development costs of energy markets managed by TSO;
- i) the cost of compliance with ENTSO-E standards.

ART. 11

(1) TSO allocates common costs between regulated system service and other regulated / unregulated services, using a method of cost allocation which respects the principles of economic causality.

(2) The costs allocated under par. (1) are used to calculate revenue proposed by the OTS system service.

ART. 12

(1) TSO provides detailed explanations:

- a) the allocation of costs;
- b) the reason for choosing the method used;
- c) quantifying the factors used in the allocation.

(2) The competent authority controls the correctness of allocation of costs to avoid subsidization between regulated system service and other services provided by the TSO.

ART. 13

In order to approve fees for system services, TSO classifies and allocates the revenue required between the service governed system and other services provided by TSO using keys allocation determined similar to art. 11 on costs.

ART. 14

(1) In calculating fees for the system, any cost / income associated system service is included only once.

(2) If it is determined that a cost / income has been included several times, it is recovered by deduction from the income of the regulated tariff period following the finding.

(3) Any cost occurred during the tariff period t , not taken into account when calculating the regulated revenue for the tariff period t , can be taken into account in determining the income of the regulated tariff period $t + 1$ based on justifications submitted by the TSO.

ART. 15

TSO has the obligation to assign the right assets / shares of actives for system services to those for the transport service, to avoid consideration of the same asset / same odds of simultaneously active and the calculation of fee for the transportation of energy electrical fee calculation and SFS.

ART. 16

OTS keeps separate records of all financial contributions received annually. The annual amount of contributions is transmitted to the competent authority according to the models for OTS activity monitoring.

ART. 17

System service tariffs are approved annually by the competent authority and they take effect at the beginning of each tariff period.

ART. 18

(1) The establishment of new rates during a tariff period is possible under the terms of art. 40, based on documents presented by the OTS.

(2) In the situation provided in par. (1) the competent authority determines a factor which corrects differences of earnings, which will include the new tariffs approved, valid until the end of the tariff period.

CAP. II

Setting the revenue

SECTION 1

Setting the revenue for the system service

ART. 19

(1) The regulated annual income of OTS for the service system (VSS^t) is calculated on the basis of justified costs to ensure safe operation of the SEN in the tariff period t .

(2) VSS^t has two components, namely:

- regulated revenue to achieve functional system service ($VSFS^t$);
- regulated revenue for the purchase of system services ($VSTS^t$).

SECTION 2

The regulated revenue to achieve functional system service ($VSFSt$)

ART. 20

(1) $VSFS^t$ is determined by the OTS as the sum of costs justified, necessary activities as the system operator, namely:

- a) dispatching SEN facilities (DEC operational command, DET and stations, operational planning and programming);
- b) management of the balancing market;
- c) congestion management;
- d) protections management;
- e) system works management;
- f) management of other markets managed by OTS.

(2) $VSFS^t$ of the tariff period t includes the following justified costs of the OTS recognized by ANRE of the related activities par. (1):

- a) Costs of operation and maintenance (COM^t) including:
 - 1. cost of raw materials and consumables;
 - 2. other costs of materials;
 - 3. costs of water, electricity and other utilities;
 - 4. costs of maintenance and repair, including executed with third parties acquired in accordance with the legal provisions on public procurement;
 - 5. cost with management and rental locations;
 - 6. costs of providing equipment;
 - 7. costs of studies and research;
 - 8. costs for other services performed by third parties (including courses for staff development, collaborators and commissions and fees, protocol, advertising and publicity, travel, delegations and transfers, postage and telecommunications fees);
 - 9. costs of staff salaries and other expenses related to personnel, granted under the law (salaries, daily allowances, bonuses, meal vouchers);
 - 10. costs of compensation fixed by mutual agreement;
 - 11. costs resulting from the payment of taxes, royalties, fees and disbursement equivalent, established in accordance with legal regulations or by local authorities;
 - 12. contributions to special funds related to the wage fund under the law in force, except those related systems / alternative pension funds and health;
 - 13. extraordinary costs caused by major force;
 - 14. costs of compensation determined by court, if the parties do not agree;
 - 15. costs of redundancy payments as required by law;
 - 16. The share of general administrative expenses.
- b) Depreciation costs of existing assets and new investment (AM^t);

- c) Unplanned costs with electricity exchanges (CSN^t);
 d) The return on the regulated asset base (RBAR^t).
 (3) VSFS^t is calculated with the formula:

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$$VSFS^t = COM^t + AM^t + CSN^t + RBAR^t - V(a)^t + KV(c)^t \quad [lei] \quad (1)$$

ST

- (4) The return on regulated asset base is calculated with:

T

$$RBAR^t = BAR(med)^t \times RRR \quad [lei] \quad (2)$$

ST

- (5) The regulated average asset base for the tariff period t is calculated with:

T

$$BAR(med)^t = (BAR^{(t-1)} + BAR^t) / 2 \quad [lei] \quad (3)$$

ST

where:

BAR^(t-1) - regulated asset base at the end of the tariff period t-1

BAR^t - regulated asset base at the end of the tariff period t

T

$$BAR^t = BAR^{(t-1)} + IA^t - EA^t - AM^t \quad [lei] \quad (4)$$

ST

IA^t - asset entries recognized by ANRE during the tariff period t

EA^t - outflows of assets or the value of assets sold / disposed during the tariff period t

AM^t - the amount of depreciation of assets that make BAR^(t-1) and the related assets put into / out of service midterm of the tariff period t, calculated by applying statutory timeframes of depreciation using the straight line method.

(6) RRR is considered equal to the one adopted for calculating regulated revenue for the transmission service, communicated to OTS.

(7) Income V_{ta} represents the income from other activities that use resources recognized for conducting related service system in the tariff period t, and include: revenues from unplanned electricity exchanges, revenues from other services and other operating income (excluding income obtained from unvalued dismemberments, recorded at the level of depreciation of fixed assets made in financial contributions, those from the sale of goods belonging to the public domain and those resulting from the cancellation of provisions for claims received and losses on receivables).

(8) KV^{(t(c))} is the correction factor for the income VSFS^t of the tariff period t, due to forecasting errors / forecasting for tariff period t-2/t-1 to the values achieved / estimated, as the case, related to the tariff periods t-2/t-1.

ART. 21

In determining VSFS^t the following are not taken into account:

- related costs for free contributions;
- cost with fines and penalties imposed to OTS;
- incomes of TSOs penalties accrued for late payment of invoices related service system.

ART. 22

(1) TSO has the obligation to submit for approval by the competent authority, on 1 October of the tariff period t-1, the annual investment plan for system service, by source of funding for the tariff period t and, on 1 August period t tariff situation to achieve annual investment plan for system service, by source of funding for the tariff period t-1.

(2) The average time frame of corresponding amortization of fixed assets expected to be put into operation / commissioned in tariff period t, determined as the ratio between the total value of inventory of fixed assets and annual depreciation exceeds 6 years both in the planning phase and the phase of the investment plan.

(3) The investment plan is based on feasibility studies.

(4) The works planned in the tariff period t-1, which were not fully achieved, will be included in the investment plan for the tariff period t.

(5) The competent authority shall approve proposed investments by TSO considered to be justified under this methodology. Otherwise, the OTS will be notified of the investments that have not been approved by the competent authority with reasons for not accepting them.

(6) Making additional investments from those included in the investment plan approved by the competent authority for tariff period t or investments to a value higher than the one approved in the plan must be justified by the TSO and approved in advance by the competent authority.

(7) The work carried out in addition to the investment plan for the tariff period t-1, with the prior approval of the competent authority, shall be entered in the investment plan for the tariff period t and is based in accordance with para. (3).

(8) The additional works performed which prior approval was not sought or have been rejected by the competent authority are not paid

SECTION 3

The regulated revenue for the purchase of system services (VSTS^t)

ART. 23

(1) VSTS^t is OTS necessary for the purchase of the following resources:

- secondary frequency-power control reserve;
- fast tertiary adjustment reserve;
- slow tertiary reserve;
- reactive power required for voltage control in RET.

(2) The regulated revenue required for STS acquisition, for tariff period t (VSTS^t) is calculated as the sum of justified costs recognized by ANRE TSO's for purchase quantities of STS schedules mentioned in para. (1) both regulated and market mechanisms.

(3) $VSTS^t$ is calculated with:

* T *

* Font 9 *

$$VSTS^t = \sum_n \sum_i [(t(STS)^{(i,n)} * Q(STSR)^{(i,n)}) + (p(STSL)^{(i,n)} * Q(STSL)^{(i,n)})] [RON] \quad (5)$$

* ST *

where:

$t(STS)^{(i,n)}$ is the regulated tariff for purchase of STS type i in the tariff period t , for the manufacturer n , [lei/hMW];

$Q(STSR)^{(i,n)}$ represents the quantity regulated by STS of type i handled by the manufacturer n in the tariff period t in [hMW];

$p(STSL)^{(i,n)}$ represents the competitive purchase price for the type i amount of STS purchased from the manufacturer n in the tariff period t in [lei / hMW];

$Q(STSLn)^{(i,t)}$ is the amount of STS type i manufacturer purchased by auction from manufacturer n in the tariff period t in [hMW].

SECTION 4

Annual Corrections

ART. 24

(1) The regulated revenue and system service tariffs for tariff period t are proposed by the TSO until October 1st of the tariff period $t-1$ and approved by ANRE.

(2) In order to ensure the regulated income STS and STS for tariff period t , OTS output the following data:

a) regulated revenue forecast for the tariff period t ;

b) corrections on the achievements regulated revenue for the tariff period $t-2$;

c) the regulated revenue adjustments based on estimates for tariff period $t-1$ (data made out of the first 8 months and forecast data for the following four months of the tariff period $t-1$).

(3) All data necessary income determination system service (STS and SFS) are expressed in nominal terms.

(4) Annual corrections applied to the regulated revenue forecast for the tariff period t updated in nominal terms of the year t .

ART. 25

Correction regarding costs included several times to establish regulated income can be carried for a period not exceeding 3 years.

SECTION 5

Corrections of $VSFS^t$

ART. 26

The $VSFS^t$ correction factor income from tariff period t , as a resulted error of estimation / forecasting for tariff period $t-2/t-1$ to the values achieved/expected to be made in the tariff period $t-2/t-1$ and proposed by TSO according to art. 24, is calculated using the formula:

* T *

* Font 9 *

$$KV^t(c) = ((\Delta)C - (\Delta)V)^{(t-1)} + ((\Delta)C - (\Delta)V)^{(t-2)} [lei] \quad (6)$$

* ST *

where:

$((\Delta)C - (\Delta)V)^{(t-1)}$ correction is the difference between costs and revenues associated with / from SFS provided by art. 20 para. (3) as a result of the forecast error compared to expected costs and revenues to be realized in year $t-1$;

$((\Delta)C - (\Delta)V)^{(t-2)}$ correction is the difference between costs and revenues associated with / from SFS provided by art. 20 para. (3) as a result of the estimation error over the costs and revenues in year $t-2$.

SECTION 6

Corrections regulated revenue for $VSTSt$

ART. 27

(1) The correction factor income $VSTS^t$ of the tariff period t shall be determined having regard to errors of estimation / forecasting for tariff period $t-2/t-1$ to the values achieved / expected to be made in the tariff period $t-2/t-1$ and proposed by TSO according to art. 24.

(2) The calculation of $VSTSt$ the competent authority determines the amount of the earnings of OTS through effective management of STS in tariff period $t-2/t-1$ and allocates 80% of the users (earnings sharing mechanism).

(3) If the income from SFS does not cover the justified costs accepted by the competent authority for tariff periods $t-2/t-1$, the competent authority may apply a correction factor of $VSTS^t$ for the tariff period t , if losses were caused by reducing the amount of electricity taken from the network (excludes energy exported).

CAP. III

Calculation of the tariff for system service

ART. 28

Service system related revenue is obtained by applying the OTS service tariff system as follows:

- suppliers / producers of electricity quantities of electricity supplied / consumed;

- operators of distribution quantities of electricity purchased to cover their own technological losses from the electricity distribution networks.

ART. 29

The fees for system services and SFS are set for a tariff period t and is calculated based on the regulated revenue for the service and electricity drawn from electricity networks (excluding energy exported).

ART. 30

The tariff for the system service $t(SS)$ for the tariff period t is calculated using the formula:

* T *

$$t(SS)^t = VSS^t / Q(e)^t \text{ [lei/MWh] (7)}$$

* ST *

ART. 31

SFS tariff, $t(SFS)$, the tariff period t is calculated using the formula:

* T *

$$t(SFS)^t = VSFS^t / Q(e)^t \text{ [lei/MWh] (8)}$$

* ST *

where:

$Q(e)^t$ - forecast electricity extracted from the network (excluding energy exported) for tariff period t .

CAP. IV

Principles for the acquisition of STS and pricing of regulated procurement of STS

SECTION 1

Principles for the acquisition of STS

ART. 32

The necessary quantities of STS for the tariff period t is determined and contracted by TSO in accordance with ENTSO-E, the Technical Code for electricity network and the Commercial Code of the wholesale electricity, approved by order of the Chairman of the Romanian Energy Regulatory Authority so as to ensure safe operation of the NPS.

ART. 33

(1) STS is acquired by OTS on a competitive basis, except when:

- a) STS provided in accordance with the provisions set by specific legislation;
- b) STS selected by the OTS provided by manufacturers so as to avoid exercise of dominance in the competitive market for electricity.

(2) In cases under par. (1) ANRE analyzes and approves justified costs of regulated prices manufacturers purchase for each type of STS provided by them.

SECTION 2

Pricing principles for establishing the regulation of the acquisition of STS

ART. 34

Producers of electricity providers of STS need to transmit to the competent authority until October 1st of each tariff period t , the proposal of regulated tariffs for the supply of STS.

ART. 35

The regulated price approved by ANRE for each supplier and each type of STS is determined based on:

- a) the unit fixed costs recorded in the STS production process provider ,
- b) the supply unit fixed costs specific to each type of STS, related equipment dedicated to ensuring each type of STS, other than those referred to a). [ART. 36](#)

(1) The unit fixed costs related to the production process is determined by dividing the fixed costs of the production process capacity generating units and the number of operating hours per year.

(2) The specific supply unit fixed costs of each type of STS is determined by dividing the fixed costs specific to each type of STS providing the qualified ability for each type of STS of generating units and the number of operating hours per year.

ART. 37

Fixed costs related to the production process include:

- a) operating and maintenance costs (staff costs, costs of raw materials, cost of utilities, maintenance work costs, taxes, royalties, etc.);
- b) cost depreciation of assets used in the production process, established by linear method, based on the legal normal life span.

ART. 38

Specific fixed costs for providing each type of STS include:

- a) resulting from the uneconomic cost of generating units providing STS: technological losses, reductions in yield, additional maintenance, electricity not produced;
- b) Cost of equipment of generating sets qualified to provide STS with equipment, communication systems and command, control loops etc., other than those referred to in art. 37 b);
- c) Cost depreciation of fixed assets used for the provision of STS, other than those referred to in art. 37 b) fixed by the straight-line method based on their legal normal life span;
- d) opportunity costs, determined by evaluating the functionality of STS on a competitive market for a period of at least one year from the date of application of the provisions of this methodology and the justifications based on STS providers.

ART. 39

(1) Purchase prices of each type of STS approved by ANRE for each supplier is determined based on unit costs justified the provision of each type of STS plus a regulated profit share.

(2) In determining the purchase price share of profits may not exceed 5%.

CAP. V

Final and Transitional Provisions

ART. 40

Prices for SFS and system service may be reviewed at intervals of at least 6 months if there are found larger differences between income and 5% of justified costs related to OTS service period.

ART. 41

To avoid unjustified increasing of the STS tariff, ANRE has the right to set limits on prices in the competitive tendering regime.

ART. 42

ANRE monitors expenditures / revenues related to STS and STS system services, and TSO periodically transmits this data, in accordance with the Guidelines for completing the activity monitor layouts TSO approved by decision of ANRE, and this methodology.

ART. 43

(1) Notwithstanding the provisions of art. 24 para. (1), setting the revenue data and system tariffs for the tariff period of 2014 are transmitted to ANRE, within 15 days from the publication of this methodology.

(2) Notwithstanding the provisions of art. 35, the acquisition data of STS pricing tariff for the period of 2014 is transmitted ANRE an 1 April 2014.

(3) Pending revision of STS purchase prices during 2014 applicable tariff approved by ANRE regulated prices applicable at the date of entry into force of this methodology.
