Georgian National Energy and Water Supply Regulatory Commission

Resolution N14

July 30 2014

Tbilisi

On approving Electricity Tariff Calculation Methodologies

Under the Article 4 (4) and Article 5 of the Law of Georgia on Electricity and Natural Gas, Georgian National Energy and Water Supply Regulatory Commission establishes the following:

1. Tariff Setting Methodology for Electricity Distribution, Pass Through and Consumption Tariffs shall be approved (Annex N1).
2. Tariff Setting Methodology for Electricity Generation, Transmission, Dispatch and Electricity Market Operator Service shall be approved (Annex N2).
3. Regulated assets depreciation/amortization rates of utilities under tariff regulation shall be approved (Annex N3).
4. This resolution shall enter into force on the date of its publication.
5. Upon entry into force of this resolution the resolution of June 8 2011 N 11 on adoption of Electricity Tariff Setting Methodologies shall be declared invalid.

Chair of Georgian National Energy and Water Supply Regulatory Commission	Irina Milorava
Commisioner	Maia Nadiradze
Commisioner	Gocha Shonia
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Tariff Setting Methodology

for Electricity Distribution, Pass Through and Consumption Tariffs

CHAPTER I

GENERAL PROVISIONS

Article 1

Purpose

1. Purpose of the Electricity Distribution, Pass thourgh and Consumtion Tariff Methodology (thereafter "the Methodology") is to define rules and principles for setting electricity tariff in accordance with the Law of Georgia on Electricty and Natural Gas, which should be thereafter used for setting tariffs for electricity distribution, pass through and consumption.

2. Tariff setting based on this Methodology is in accordance with the international practice of incentive regulation (marginal price regulation) principles, which stimulates increase of the efficiency of the utilities.

Article 2

Definitions

1. The terms used in this methodlogy have the same meanining as in the Law of Georgia on Electricity and Natural Gas.

2. Other terms used in this methodology for the tariff regulation purposes have the following meaning:
   a) **Intangible assets**– identifiable, non-monetary assets without physical form including patent, trade mark, goodwill, software, license and other types of intangible assets;
   b) **Non Controllable Operational Expenses (ncOPEX)**– costs that occur due to external factors and which cannot be influenced by the utility;
   c) **Assets** – tangible and intangible assets;
   d) **Asset replacement costs** - total amount of expenses, which needs to be evaluated in order to create similar asset;
   e) **Asset cost** – the real value of payments in money or money equivalents or other compensation during the creation or the first purchase of an asset;
   f) **Historic cost asset valuation method** – Asset cost evaluation using the price of its creation or the first purchase;
   g) **Reasonable costs** – cost incurred in accordance with the minimum cost principles, which is rational and nessesary for the effective functioning of the utility;

h) **Cost audit** – regulations mechanisms, by means of which the commission or/and neutral third party set reasonable costs incurred by the utility and define regulatory asset base;

i) **Cost cascading method** –allocation of the costs of the upper voltage levels of the distribution grid to costs of the next voltage levels;

j) **Electricity distribution tariff** – distribution service price for providing distribution service to the customer via the distribution grid;

k) **Electricity pass through tariff** – price of the pass through service provided by the distribution licensee via the distribution grid for passing through electricity which belongs to other entities;

l) **Electricity consumption tariff** – price of electricity consumed by the retail customer;

m) **Electricity normative loss** – allowed technical loss of energy which occurs while transporting energy via distribution grids;

n) **Electricity extra normative loss** – positive difference between the factual and normative loss rates set by GNERC for the distribution grids;

o) **Electricity factual loss** – difference between the volumes of electricity received and distributed via the distribution grids, calculated based on the readings of the metering devices;

p) **Efficiency factor (X-factor)** - rate of increase of productivity and operational efficiency of utility, which includes the general efficiency factor ($X_{gen.}$) and individual efficiency factor ($X_{ind.}$)

q) **General efficiency factor ($X_{gen.}$)**- rate of increase of the concrete sector's efficiency;

r) **Individual efficiency factor ($X_{ind.}$)** - rate of increase of the concrete utility's efficiency;

s) **Investment** –capital investment which is used for creating, purchasing or/and rehabilitation of assets, the useful life of which, is more than one year;

t) **Weighted Average Cost of Capital (WACC)** – rate of return based on regulatory assets, calculated before taxes, according to the capital structure of the company (own and attracted capital);

u) **Capital Expenses (CAPEX) -** return on Regulatory Asset Base and depreciation/amortization, for the purpose of this Methodology;

v) **Controllable Operational Expenses (cOPEX)**– costs that occur due to internal factors which can be controlled by the company;

w) **Tangible Assets** – major assets used by the company for the regulated activity, including land, buildings, machinery, equipment and other main assets the useful life of which is more than one year;

x) **Third party-** any individual or legal person (including a State, customer, etc.), which provides subsidy to the utility, gives grant, pays fees for the connection to the electricity transmission network and/or gives tangible and intagible assets to the utility for free.

y) **Regulated activity** – for the purpose of this Methodology activities of the electricity distribution and pass through, regulated by the Commission in accordance with the Law of Georgia on Electricity and Natural Gas;

z) **Regulatory Cost base (RCB) –** allowed income for the utility set by the Commission for the Tariff Year, which is necessary for the effective functioning of the utility and includes reasonable costs and rational profit;

aa) **Regulatory Assets Base (RAB)** – tangible and intangible assets used for the regulated activity, that are directly related to the regulated activity and are used in tariff calculation(except third-party-funded assets);

bb) **Building block approach** – defining the Regulatory Cost Base by the determination of its components;

cc) **Base year -** first test year for the tariff regulation period;

dd) **Consumer Price Index (CPI)** – average annual inflation rate published by the National Statistics Office of Georgia;

ee) **Operational Expenses** – expenses related to the operation and maintenance of the electricity distribution grid.

ff) **Tariff application** – application form approved by the Commission, which includes financial and technical data for the test year of a utility as well as investment plan for the regulatory periods;

gg) **Tariff Regulatory period** -time period set by GNERC (3 to 5 years) for which tariffs are reviewed using correction factors foreseen in this Methodology;

hh) **Tariff Year (t+1)** - the calendar year for which the Commission sets tariffs in accordance with this Methodology;

ii) **Test year (t-1)**–the calendar year prior to the tariff calculation year by the Commission;

jj) **Utility -** distribution licencee who are subject to tariff setting according to this Methodology for electricity distribution, pass through and consumption;

kk) **Tariff calculation year (t)-** the calendar year prior to the tariff year;

ll) **Depreciation/Amortization** – gradual allocation of depreciable amount of the tangible/non-tangible asset over its useful life;

mm) **Net book value –** asset cost minus accumulated depreciation and accumulated revaluation loss.

Article 3

Main Principles

1. This Methodology and the tariffs set on its bases

   a. protect consumers from the monopolistic prices;
   b. stimulate utility to increase its efficiency via optimization of its costs with the requirement not to decrease qualiy of service standards and technical conditions of the utility;
   c. support the increase of the utility's' returns by means of increased operational and management efficiency;
   d. support the stable and realible functioning of the utility;
   e. ensure that tariffs are transparent, stable and fair for the utility;
   f. reflect the state policy with regard to discount tariffs, provided that none of the consumers categories shall receive a discount tariff subsidized by licensee, importer, market operator or any other category;
   g. reflect different costs between the different consumer categories;
   h. cover costs of the utility with funds recieved from each consumer category in proportion to costs incurred for servicing this consumer category.

2. For the determination of the Regulatory Cost Base structure of a utility, the Commission uses building block approach. The following components are used in this method:

   a. Capital expenses;
   b. Controllable operational expenses;
   c. Non-controllable operational expenses;
   d. Costs for filling normative losses in electricity distribution network.

3 Calculation of capital and non-controllable operational expenses is carried out by "cost-plus" method, with annually cost audit.

4   For calculation controllable operational costs "incentive regulation" principle is used, which implies setting up incentives to optimize utility's costs. Controllable operational costs audit is carried out before regulatory period and costs changes are made during tariff regulatory period accordingly to this methodology.

5   In case the result of the cost audit revealed corrective information of the previous year(s) existed before test year, which was not identified in the previous year(s) tariff calculations, Commission has authority to use this information for correcting the results of the audit. Correction shall to be made by using principles outlined in Chapter IV of this methodology.

6   The amount of actual losses and the target parameter estimation model is used to calculate filling of electricity normative losses in the distribution grid.

7   All tariffs set by the Commission are VAT exclusive.

Article 4

Tariff regulatory and tariff setting period

1. Based on this methodology tariff regulation period is determined individually for specific utilities.

2. Commission sets tariff regulatory period for each year according to the terms and conditions of this methodology.

3. The Commission sets for the whole tariff regulatory period the basic components of the Weighted AvarageC of Capital (WACC) and fixed rate for the efficiency factor (X-factor).

4. Tariffs are set annually by the Commission during tariff regulatory period, and it is valid from January 1 to December 31.

CHAPTER II

CALCULATION OF THE REGULATORY COSTS

Article 5

Regulatory Cost Base for the Tariff Year

Regulatory Cost Base for the tariff year is calculated according to the following formula:

$$RCB_{(t+1)} = CAPEX_{(t+1)} + cOPEX_{(t+1)} + ncOPEX_{(t+1)} + CNL_{(t+1)} + CORR_{(t+1)} \quad (1)$$

where,

$RCB_{(t+1)}$ - Regulatory Cost Base for the tariff year(GEL);

$CAPEX_{(t+1)}$ - Capital Expenses for the tariff year (GEL);

$cOPEX_{(t+1)}$ - Controllable Operational Expenses for the tariff year (GEL);

$ncOPEX_{(t+1)}$ - Non-controllable Operational Expenses for the tariff year (GEL);

$CNL_{(t+1)}$ - Cost of Normative Losses in distribution networks for the tariff year (GEL);

$CORR_{(t+1)}$ - Cost correction factor, which provides the reflection of the difference between factual and planned costs of Tariff Year in the Regulatory Cost Base of the Tariff Year, and also received income from non-operational activity envisaged in the subparagraph "e" of paragraph 1 of Article 19 of this Methodology, based on the principles defined in this Methodology (GEL)

Article6

Capital Expenses

Capital Expenses for the Tariff Year are calculated according to the following formula:

$$CAPEX_{(t+1)}= RAB_{(t+1)} * WACC + D_{(t+1)} \qquad (2)$$

where,

$CAPEX_{(t+1)}$ - Capital Expenses for the tariff year (GEL)

$RAB_{(t+1)}$ -Regulated Assets Base for the tariff year (GEL)

$WACC$ - Rate of returne on the RAB for the tariff regulatory period (%);

$D_{(t+1)}$ - annual depreciation for the tariff year (GEL)

Artilce 7

Regulatory Asset Base

1. In the formation of the Regulated Asset Base, current utility assets and planned investment assets agreed with the Commission are involved.
2. For calculating the value of assest, the Commission uses Historic Cost Valuation Method.
3. In case the assets value can not be determined by the method specified in paragrah 2 of this article, Commission has the autority to use replacement cost asset valuation method.
4. In case the utility sells regulatory assets to other utility, the Commission does not envisage asset re-sale value while calculating relevant tariffs.
5. Investment cost is used to value planned assets cost, which is agreed with the Commission. (Construction, purchase, repair, etc.)
6. The value of RAB is determined by the Net Book Value of the assets that constitute RAB.

7. During the regulatory period the Commission reflects in RAB annual planned investment for Tariff Calculation Year and Tariff Year according to the investment plan of the utility. The investment plan of utility, as well as amendments in investment plan before tariff setting or correction, should preliminary be agreed with the Commission. The utility should justify the necessity for the planned investment, as well as planned target effect and the benefit. The Commission shall approve and consequently reflect in RAB only those investments, which it considers as justified and reasonable after the appropriate review and assessment.

8. If planned investment by the utility (specific investment project) was not carried out based on the investment plan provisions agreed with GNERC (was not over till the end of the investment plan year), such investments are considered as construction-in-progress and capital expenses on these investments are subject to correction, in accordance with this Methodology.

9. If the utility does not submit the investment plan and does not agree the volume of investment with the Commission, the Commission is authorized not to consider the factual uncoordinated investment while calculation of tariff.

10. If the company cannot achieve the targets planned for the investment, including quality of service standards set by the Commission, the Commission is authorized to apply penalty mechanisms according to the current legislation. If the company reaches the targets, the Commission uses the incentive mechanisms.

11. The RAB shall not reflect:
    a) Those investments that were carried or will be carried out by third party financing; companies should account for such assets separately;
    b) Those investments which are not considered as justified and reasonable by the Commission;
    c) Assets that are not used in regulated activity;
    d) construction in progress;
    e) Goodwill, except for goodwill which were formed during privatization of the state property.

12. The Commission will consider capitalized cost of the paid loan according to the factual annual interest rate for the long term loan taken to finance the construction during the construction process in the cost of asset defined in subparagraph D of paragraph 11 of this article, but the rate should not exceed the rate of debt (r_d) defined in this Methodology.

13. For regulatory purposes the Commission is authorized to consider asset impairment while defining net book value of the asset. In addition, the Commission is authorized to reflect asset impairment loss in tariff in some cases. Accounting of impairment loss shall be done separately by the utility.

14. RAB value at the end of the tariff year shall be determined based on the following formula:

$$RAB_{(t+1)}=TA_{(t-1)}+IA_{(t-1)}-TP_{(t-1)}-RA_{(t-1,t,t+1)}+pINV_{(t,t+1)}-pD_{(t,t+1)}-pTP_{(t,t+1)}+pDTP_{(t,t+1)} \quad (3)$$

Where,

$RAB_{(t+1)}$ - value of RAB at the end of the tariff year(GEL);

$TA_{(t-1)}$ -value of tangible assets at the end of the test year (GEL);

$IA_{(t-1)}$ -value of intangible assets at the end of the test year (GEL);

$TP_{(t-1)}$ value of assets, financed by third party, at the end of the test year (GEL);

RA(t-1,t,t+1) - Retired assets in the test year, assets value which will be retired within investment plan in the Tariff Calculation Year and Tariff Year, and value of the impairment loss during test year (GEL)

pINV(t, t+1)- value of planned assets envisaged by invetsment plan approved by the Commission for the calculation year and the Tariff Year (GEL)

pD(t,t+1) -annual depreciation/amortization for the tariff calculation year and tariff year charged to tangible and intangible assets (GEL)

pTP(t,t+1)-assets cost financed by third party during tariff year and tariff calculation year (GEL)

pDTP(t,t+1) -annual depreciation/amortization of the assets, created by third party financing, during tariff calculation year and tariff year (GEL)

Artilcle 8

Depreciation/Amortization

1. The Commission shall apply the Straight-line method of depreciation/amortization.
2. For the assets which were purchased or created after January 1, 2014,"Regulated Asset depreciation/amortization Rates for Regulated Utilities" shall be used approved by the commission.
3. With regard to assets purchased or created before January 1, 2014 GNERC is authorized to use depreciation/amortization rates defined in the tax code.

Article 9

Weighted Average Cost of Capital

1. Rate of Return on RAB is defined based on Weighted Average Cost of Capital (WACC) method.
2. Weighted Average Cost of Capital (WACC) is fixed during the regulatory period.
3. The pre tax Weighted Average Cost of Capital (WACC) for each regulatory period is calculated as follows:

$$\textbf{WACC}_{pre-tax} = \textbf{\textit{g}} * \textbf{\textit{r}}_d + \frac{\textbf{\textit{(1-g)}}*\textbf{\textit{r}}_e}{\textbf{\textit{(1-T)}}} \qquad \textbf{\textit{(4)}}$$

where,

WACC pre-tax - pre tax Wighted Average Cost of Capital (%)

g – share of loans(%)

r_d – cost of debt (%)

r_e – cost of own capital (%)

T – profit tax (%)

4. Cost of debt and own capital is calculated based on the following formula:

$$r_d = r_{rf} + DP \qquad (5)$$

$$r_e = r_{rf} + \beta \times (r_m - r_{rf}) \qquad (6)$$

Where,

r_{rf} - risk free rate (%)

DP - debt premium (%)

r_m - market risk (%)

β - relative sectorial risk factor

5. The share of loans (g) of the total capital is 60 percent.

6. Risk free rate (r_{rf}), relative sectorial risk factor (β), market risk premium (r_m-r_{rf}), and the debt premium (DP) are fixed for each tariff regulatory period. The commission will determine the long-term risk-free interest rate based on the annual income for the long-term international state bonds before the expiration date, and the market risk premium and the debt premium will be determined on the basis of expert opinion.

Article 10

Operational Costs

1. For the purpose of this Methodology operational costs consist of two components: – controllable and non-controllable expenses.

2.   Operational expenses should ensure the recovery of costs associated with the regulated activity, in particular:
     i.   service and maintenance costs
     ii.   administrative and general expenses

3. Operational costs cover maintenance cost of fix assets financed by third party, including current repair, service and maintenance as well as other costs.
4. Operational costs cover reimbursement of the short-term loan interest borrowed for financing working capital, which should not exceed average annual interest rate on the short term loans issued by commercial banks to legal entities.
5. For calculating operational costs for the Tariff Year, operational costs for the Test Year, which are justified, reasonable and fair, are considered.
6. In case the utility does not have factual data for test year, the Commission is authorized to request from the utility technical and economic forecasting data for the Tariff Year by the tariff application. The Commission is authorized to consider only the data which is justified, reasonable and fair.
7. For tariff calculation for the Tariff Year the Commission uses audited factual financial and technical data, that should be submitted according to the Commission approved form and should be verified by the head of the company or duly authorized person.
8. Within its mandate the Commission is authorized to verify the correctness of the submitted documentation, assess fairness and reasonableness of the costs submitted. For this purpose the Commission is authorized to assess operational costs for the test year based on operational cost analysis of the preceding year.
9. If in addition to the regulated activity as defined by this Methodology, the utility carries out other non-regulated activities, costs associated with that activity shall not be reflected in tariff calculation.

Article 11
Controllable Operational Expenses

  i.   Controllable Operational Expenses include all costs over which the utility has the ability to make a decision and therefore may affect them (salaries, on-going repair works, outsourcing, office maintenance, insurance costs, security costs, business trip, etc.)
 ii.   The base of Controllable Operational Expenses of the utility shall be audited Controllable Operational Expenses of the Base Year; audited Controllable Operational Expenses for every Tariff Year of Tariff Regulatory period is changing according to the Consumer Price Index and Efficiency Factor and it is calculated by following formula:

$$cOPEX_{(t+1)} = cOPEX_{(t-1)} * (1 + CPI_t - X_t) * (1 + CPI_{(t+1)} - X_{(t+1)}) \quad (7)$$

where:

$cOPEX_{(t+1)}$ - Controllable Operational Expenses for the tariff year (GEL);

$cOPEX_{(t-1)}$ - Controllable Operational Expenses for the test year (GEL);

CPI_t - average annual rate of inflation, during tariff calculating year, which is calculated in accordance with paragraph 3 of this Article. (%);

$X_{(t)}$ - efficiency factor during tariff calculation year (%);

$CPI_{(t+1)}$ - average annual rate of inflation, during tariff year, which is calculated in accordance with paragraph 4 of this Article, (%);

$X_{(t+1)}$ - efficiency factor during tariff year (%).

iii.   For the inflation (CPI_t) rate of the Tariff Calculation Year (t) a percentage change of annual average value of year (t-2) compared to annual average value of year (t-3) is taken.
iv.   For the inflation rate (CPI_{t+1}) of the Tariff Year (t+1) a percentage change of annual average value of year (t-1) compared to annual average value of year (t-2) is taken.

Article 12

Non-controllable Operational Expenses

1.   Non- controllable Operational Expenses include all costs which are triggered by outside factors and utility cannot affect them. This includes taxes, fees, regulation fee, market operator tariff etc.

2. For the tariff year, the non-controllable operational expenses from the test year is changed by the Consumer Price Index and is calculated as follows:

$$ncOPEX_{(t+1)} = ncOPEX_{(t-1)} * (1 + CPI_t) * (1 + CPI_{(t+1)}) \quad (8)$$

where:

$ncOPEX_{(t+1)}$ – Non-controllable Operational Expenses for the tariff year (GEL);

$ncOPEX_{(t-1)}$ - Non- controllable Operational Expenses for the test year (GEL);

CPI_t - average annual rate of inflation during tariff calculating year, which is calculated in accordance with the paragraph 3 of Article 11. (%);

$CPI_{(t+1)}$ - average annual rate of inflation during tariff year, which is calculated in accordance with the paragraph 4 of Article 11.(%).

Article13

Electricity Normative Loss

1. The electricity normative loss rate is set by according to the rule envisaged in the relevant normative act and is effective during the regulatory period.

2. The electricity normative loss rate set by the Commission is fixed during regulatory period, except in cases specified by law.

3. New rates of the electricity normative losses are set before the start period of each regulatory period.

4. The commission sets normative loss rate with its separate resolution.

5. The cost of normative loss shall be reflected in tariff only in those cases where this service includes such cost by law.

6. If factual loss rate in distribution grid exceeds the approved rate, the difference shall not be reflected in tariff calculation and will not be reimbursed.

7. If factual loss rate is less than approved normative rate, the utility shall keep the profit from the difference.

8. When distribution grid services envisage the obligation for filling the normative losses, the cost of energy to compensate for the normative loss is calculated based on the following formula:

$$CNL_{(t+1)} = P_{ave(t+1)} * E_{loss(t+1)} / 100 \qquad (9)$$

Where,

$CNL_{(t+1)}$ – normative loss value for the ditrubution grid for the tariff year (GEL)

$P_{ave(t+1)}$ – average weighted cost of energy to be purchased to compensate the normative losses for the tariff year (tetri/kWh),

$E_{loss(t+1)}$ – volume of normative losses for the tariff year (kWh)

9. Weighted average cost of energy to be purchased for the tariff year by distribution licensee to recover electricity normative losses includes costs related to the electricity purchase cost and is calculated in accordance with paragraph 2 of the Article 17.

10. The amount of electricity normative losses in the tariff year is defined considering forecasted amount of distributed and passed through electricity in accordance with the paragraph 1 of Article 17.

Article 14

Cost Distribution (Allocation)

1. If the utility carries out more than one regulated activity as well as non-regulated activity, it is obligated to present unbundled data about costs and revenues for each regulated activity to the Commission for the Test Year according to the Commission approved reporting forms.

2. The Commission sets distribution, pass through and consumption tariffs according to the voltage levels of the distribution grids of the company.

3. The Company is obligated to allocate direct cost of the test year to the corresponding voltage levels. Non-direct costs should be also allocated for each voltage level and utility has to prove the reasonability of the allocation method.

4. The Commission is authorized to disagree with the non-direct cost allocation method (considering it unjust and unreasonable) and use another method of cost allocation.

5. For calculating the relevant tariff according to voltage levels, the Commission carries out cost allocation between voltage levels based on Cost Cascading Method. (Annex #1).

CHAPTER III

TARIFF CALCULATION

DISTRIBUTION, PASS THROUGH AND CONSUMPTION TARIFF CALCULATION

Article 15

Electricity Distribution and Pass through Tariffs

1. For the distribution licensee distribution and pass through tariffs are set for distribution and pass through activities.
2. Electricity Distribution and Pass through Tariffs are set according to the following voltage levels:
    a. on 0,2-0,4 kV;
    b. on 3,3-6-10 kV;
    c. on 35-1110 kV.

3. Electricity distribution tariffs for each voltage level are calculated according to the following formula:

$$T_{i\,Distrib} = \frac{RCB_{i\,(t+1)}}{E_{i\,Distrib(t+1)}} * 100 \qquad (10)$$

where,

$T_{i\,Distrib}$_   distribution tariff for i-voltage level   (tetri/kWh)

$RCB\,i_{(t+1)}$ - Regulated Cost Base of the entity for the tariff year of the tariff regulatory period, allocated to i-voltage level according to this Methodology(GEL)

$E_{i\,Distrib(t+1)}$ – Sum of forecasted amounts of electricity distributed and passed through the distribution network for the tariff year according to the each i-voltage level (kWh)

i – Corresponding voltage level of the electricity distribution network.

4. Pass through tariff equals to the distribution tariff.

Article 16

Electricity Consumption Tariff

1. Electricity consumtion tariff includes costs related to the electricity purchase and distribution.
2. Electricity consumtion tariff is set for each voltage level of the distribution network; it is based on principles of this Methodology and this article and is calculated according to the following formula:

$$T_{i\,Consum(t+1)} = P_{ave(t+1)} + T_{i\,Distrib\,(t+1)} \quad (11)$$

where,

$T_{i\,Consum(t+1)}$ -Electricity consumtion tariff for i-voltage level of the distribution network for the tariff year (tetri/kWh)

$T_{i\,distrib}$- electricity distribution tariff for i-voltage level of the distribution network for the tariff year (tetri/kWh)

$P_{ave(t+1)}$ – forecasted weighted average price of the electricity to be purchased in the tariff year by distribution licensee, which includes all costs of purchasing according to the legislation (tetri/kWh)

i - Corresponding voltage level of the electricity distribution network.

Article 17

Amount of Electricity and Weighted Average Price

1. While calculating the tariffs the Commission utilizes the actual amounts of purchased and distributed electricity during the test year, considering the consumption dynamics in the sector and/or the Electricity (Capacity) forecasted balance approved for Tariff Year during tariff calculation year.

2. The utility is obliged to submit the possible amount and price of the electricity to be purchased from particular sources according to the paragraph 1 of this article, for the purpose of determining weighted average price of the electricity to be purchased in the tariff year by distribution licensee; also other forecasted costs related to electricity purchase, such as transmission, dispatch service and purchasing the guaranteed capacity. Based on submitted information the Commission sets Weighted Average Price for Purchased Electricity by the utility.

3. Based on submitted information the Commission sets Weighted Average Price for Purchased Electricity by the utility for tariff year according to the following formula:

$$P_{aver(t+1)} = \frac{COSTE(t+1) + COSTGC(t+1) + COSTT(t+1) + COSTD(t+1) + CORR\ El.(t+1)}{E\ Receiv.(t+1)} * 100\ (12)$$

Where,

$P_{aver(t+1)}$ - Weighted Average Price for electricity to be purchased for tariff year by the utility (tetri/kWh)

$COST_{E(t+1)}$ – Total forecasted cost of electricity to be purchased by the utility for the tariff year (GEL)

$COST_{GC(t+1)}$ - Total forecasted cost of guaranteed capacity fee for tariff year (GEL)

$COST_{T(t+1)}$ – Total forecasted cost of transmission service provided by transmission licensees (GEL)

$COST_{D(t+1)}$ – Total forecasted cost of dispatch service provided by dispatch licensee (GEL)

$CORR_{El.(t+1)}$ – Electricity Purchase Correction Factor, which ensures the reflection of the difference between planned and actual costs related to the Electricity purchase for Tariff Year;

$E_{Receiv.(t+1)}$ – Forecasted amount of electricity received (metered) on the delivery points of the utility for the tariff year (kWh)

TARIFF CORRECTION

Article 18

Tariff Correction Principles and Main Mechanisms

1. This methodology envisages reflection of the planned figures (RAB, investments, amounts of the electricity purchased and distributed (passed through), etc.) in the RCB. Accordingly, the Commission is authorized to make tariff correction for each year of the tariff regulatory period based on the Cost Correction Factor.
2. Electricity Consumption Tariff is adjusted based on the correction of the Electricity Distribution Tariff or Weighted Average Price for Electricity.

Article 19

Correction of Distribution Tariff

1. Electricity Distribution Tariff for every tariff year is subject to correction and it is based on the following factors:
   a. factual investment;
   b. distributed and passed through electricity volume;
   c. cost of electricity normative losses;
   d. quality of service;
   e. non-operating income.
2. Cost correction factor is calculated according to the following formula:

$$CORR_{(t+1)} = cRRAB_{(t+1)} + cD_{(t+1)} - cRev_{(t+1)} + cCNL_{(t+1)} - nopREV_{(t+1)} (13),$$

Where:

$CORR_{(t+1)}$ — Cost correction factor for tariff year (GEL)

$cRRAB_{(t+1)}$ — Difference between factual and planned return on RAB for test year (t-1), reflected in tariff year (t+1) (GEL);

$cD_{(t+1)}$ — Difference between factual and planed values of depreciation for test year (t-1), reflected in tariff year (t+1) (GEL);

$cRev_{(t+1)}$ – Difference between the returns on factual distributed and planned to distribute electricity for the test year t-1), reflected in tariff year (t+1) (GEL);

$cCNL_{(t+1)}$- Difference between factual and planed values of normative losses for the test year t-1), reflected in tariff year (t+1) (GEL);

$nopREV_{(t+1)}$ – profit from the selling of retired assets and from non-regulated activities using assets from RAB, positive difference between the utility's income from the connection of the new customers to the distribution network and the costs related to them, also received funds for financing the operating costs from the third party for the test year (t-1) (GEL).

Article 20

Correction of Capital Costs

1. If factual investment made by the utility during the tariff regulatory period differs from the amount of planned investment, then the tariff correction is carried out according to the factual investment, taking into consideration the principles described in the Article 7 of this methodology.
2. Correction of Capital Costs for the difference received from the investment amount is calculated according to the following formula:

$$cRRAB_{(t+1)} = [(aRAB_{(t-1)} - pRAB_{(t-1)}) \times WACC_{(t-1)}] \times (1 + WACC_{(t-1)}) \times (1 + WACC_t)(14),$$

Where:

$cRRAB_{(t+1)}$ – Corrected cost or the return for (t+1) period (GEL);

$aRAB_{(t-1)}$ – Factual cost of RAB for (t-1) period (GEL);

$pRAB_{(t-1)}$ – Planned cost of RAB for (t-1) period (GEL);

WACC – Rate of time value of money, which is equal to WACC (%).

$$cD_{(t+1)} = (aD_{(t-1)} - pD_{(t-1)}) \times (1 + WACC_{(t-1)}) \times (1 + WACC_t) \quad (15),$$

$cD_{(t+1)}$ – Corrected cost of Annual depreciation for (t+1) period (GEL);

$aD_{(t-1)}$ - Factual cost of Annual depreciation for (t-1) period (GEL);

$pD_{(t-1)}$ - Planned cost of Annual depreciation for (t-1) period (GEL);

WACC - Rate of time value of money, which is equal to WACC (%).

Article 21

Correction of the Revenues from Electricity Distribution and Pass through

1. If factual distributed and passed through electricity of utility differs from the planned amounts during tariff regulation period for each year, then correction of RCB of utility is calculated according to the following formula:

$$cREV_{(t+1)} = [(aE_{(t-1)} - pE_{(t-1)}) \times T_{(t-1)}] \times (1 + WACC_{(t-1)}) \times (1 + WACC_t) \quad (16),$$

Where:

$cREV_{(t+1)}$ – Corrected cost of Revenue for (t+1) period (GEL);

$aE_{(t-1)}$ – Factual amount of distributed and passed through electricity for (t-1) period (GEL);

$pE_{(t-1)}$– Planned amount of distributed and passed through electricity for (t-1) period (GEL);

$T_{(t-1)}$– Tariff for (t-1) period (GEL);

WACC – Rate of time value of money, which is equal to WACC (%).

2. If the difference between the factual distributed and passed through electricity and planned amount is caused by the reason of the utility, the Commission will not use correction mechanism defined in the Paragraph 1 of this Article.

Article 22

Correction of the Cost of Normative losses

1. If factual distributed and passed through electricity of utility differs from the planned amounts during tariff regulation period for each year, the Commission provides determination of the losses for factual distributed and passed through electricity and makes corrections of the Cost of Normative losses according to the following formula:

$$cCNL_{(t+1)}=[(aE_{Loss(t-1)} \times aP_{ave(t-1)} - pE_{Loss(t-1)} \times pP_{ave(t-1)})] \times (1 + WACC_{(t-1)}) \times (1+WACC_t) \quad (17),$$

$cCNL_{(t+1)}$ – Corrected cost of Electricity Normative Losses for (t+1) period (GEL);

$aE_{Loss(t-1)}$ – Corrected amount of Electricity Normative Losses, which is calculated according to the Paragraph 2 of this article (kWh);

$pE_{Loss(t-1)}$ – Planned amount Electricity Normative Losses for (t-1) period (kWh);

$aP_{ave(t-1)}$ – Factual weighted average price of purchasing electricity for (t-1) period (GEL);

$pP_{ave(t-1)}$ – Planned weighted average price of purchasing electricity for (t-1) period (GEL);

WACC – Rate of time value of money, which is equal to WACC (%).

2. Corrected amount of Electricity Normative Losses for the test year is calculated according to the following formula:

$$aE_{Loss(t-1)} = aE_{(t-1)}/(1-L) - aE_{(t-1)} \quad (18),$$

Where:

$aE_{Loss(t-1)}$ – Corrected amount of Electricity Normative Losses for (t-1) period (kWh);

$aE_{(t-1)}$ – Factual amount of distributed and passed through electricity for the (t-1) period (kWh);

L –Rate of Normative Losses set by the Commission for the regulatory period (%).

Article 23

Correction of Weighted Average Price of Electricity

1. If during the regulatory period factual weighted average price of purchased electricity differs from the planned price, the Commission is authorized to make correction of Weighted Average Price of Electricity for each year of the tariff regulation period using the principle of the time value of money envisaged in this Methodology.
2. The Correction of Weighted Average Price of Electricity is based on the following factors:
     a. amount and cost of purchased electricity
     b. cost of purchased guaranteed capacity, transmission and dispatch service.
3. The Correction of Weighted Average Price of Electricity is made in case the change between factual and planned data is not due to the utility.

CHAPTER V

TARIFF SETTING AND APPLICATION SUBMISSION PROCEDURES

Article 24

Accounting and Reporting

1. For regulatory purposes the utility is obligated to carry out its accounting and reporting based on the Unified System of Accounts (USOA) according to the current legislation.

2. If utility carries out more than one regulated activity as well as non–regulated activity, it is obligated to account its revenues, costs and financial results separately for each regulated activity.

3. The utility should submit information about fixed assets created from customer financial sources separately according to the conditions of this Methodology.

Article 25

Required Documents for Tariff Calculation

1. The utility has to submit tariff application to the Commission for the purpose of tariff setting for the tariff calculation period.
2. Tariff application and data templates, also the list of documentation to be filled with tariff application is determined according to the individual legal-administrative act of the Commission.
3. Together with tariff application the utility must submit the following audited documentation complied with IFRS:

       a) balance sheet
       b) Profit and Loss Statement
       c) Cash Flow Statement

4. The Commission is authorized to request from the utility other additional information which it finds appropriate.
5. The responsibility on the accuracy of the information contained in the tariff application lies on the party submitting the application.

Article 26

Tariff Setting Timeline and Procedures

1. The utility should submit tariff application to the Commission no later than 150 days prior to expiry date of the tariff period.
2. The Commission reviews the tariff application for compliance and completeness within three days upon submission.
3. If the Commission finds tariff application incomplete or it does not correspond with the approved form, it sets the deadline in written form of no more than 45 days for amending this. This period shall be extended only once at the request of the applicant, for no more than 15 days.
4. If the tariff application is not submitted in time defined in paragraph 3 of this Article, it remains unconsidered according to the decision of the Commission. If unconsidered tariff application was submitted due to

legislation (due to expiration of regulatory period), sanctions shall be imposed on the company in accordance with the law.

5. The Commission is authorized to make a relevant decision and review the utility's tariffs on its own initiative. In this case the provisions of submitting necessary information and documentations are determined by the decisions by the Commission.

6. Upon acceptance of properly submitted application and in case of paragraph 5 of this Article, the Commission starts public administrative proceedings and the notice shall be published on the Commission web site.

7. Tariff application is reviewed according to public administrative proceeding rule under Georgian legislation. Therefore, tariff application and enclosed documents (except for Personal information relating to identifiable entities, as well as commercially confidential information considered by the Commission) are public and shall be available to any interested party.

8. All the interested parties are authorized to get familiar with materials presented to the Commission and provide their comments.

9. Comments on the tariff application shall be submitted in written form and shall include justified argumentations. In addition, the interested party is entitled not to indicate his identity while submitting own comments. The copy of the comments shall be sent to the provider of the tariff application and comments shall be discussed on the public hearing of tariff application.

10. The Commission is authorized to request additional information or different types of conclusions from the utility while reviewing tariff application.

11. In the process of reviewing the tariff application before reaching the final decision, the Commission is authorized to organize meetings and/or public hearings for the review of the tariff application.

12. Applicant shall be notified about the time and venue of the public hearing seven days in advance.

CHAPETR VI

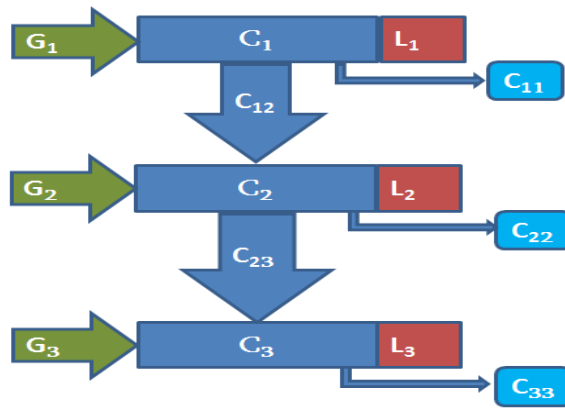**TRANSITIONAL PROVISIONS**

Article 20

Transitional Provisions

1. For the first regulatory period the components of the WACC is determined as follows:
    a. Risk-free rate (r_{rf})   – 7.50%;
    b. Debt Premium   (DP)   -3.50%;
    c. market risk premium (r_m- r_{rf})   - 7.25%;
    d. sectorial risk coefficient (β)   -1.00
2. For the first Regulatory period (from January 1, 2015) general efficiency factor (X_{gen}) equals to the 2%, and individual efficiency factor (X_{ind}) is equals to 0.
3. For that utility whose tariff is set till August 31, 2014, the first regulatory period is applied from the September 1, 2014 till December 31, 2017. Correction principles and mechanisms defined in this Methodology will be applied only for the regulatory period from January 1, 2015 till December 31, 2017.
4. Corrections defined in the Chapter IV of this methodology will be carried out from the second calendar year of the first regulatory period annually (expect of the corrections defined in the sub-paragraph e) of Paragraph 1 of Article 19).
5. Tariff correction by service quality factor shall be carried out after appropriate rule will enter into the force by the Commission.

Annex N1

Cost Cascading Method

Cost Cascading (allocation) mechanism of allocating different voltage levels to the consumers (2nd stage of cost allocation), according to the energy consumption by voltage levels:

G1 – Energy supply from Generation to the first level

G2 – Energy supply from Generation to the second level

G3 – Energy supply from Generation to the third level;

L1 – Total losses on the first level;

L2 – Total losses on the second level;

L3 – Total losses on the third level;

C_{11} – Delivered energy to the first level consumers (consumption on the first level);

C_{12} – Energy supply from first level to the second level;

$C_1 = C_{11} + C_{12}$, Total delivered energy from the first level (G1 - L1);

C_{22} – Delivered energy to the second level consumers (consumption on the second level);

C_{23} - Delivered energy to the second level from the third level;

$C_2 = C_{22} + C_{23}$, Total delivered energy from the second level (G2 + C12 - L2);

C_{33} - Delivered energy to the third level consumers (consumption on the third level);

$S_{11} = C_{11}/ C_1$ - Energy share consumed by first level consumers in the total delivered energy from this level

$S_{22} = C_{22}/ C_2$ - Energy share consumed by second level consumers in the total delivered energy from this level

$S_{33} = C_{33}/ C_3$ - Energy share consumed by third level consumers in the total delivered energy from this level

Cost Cascading (allocation) mechanism is based on energy consumptions on separate voltage levels

S1 = S11 × Cost1 ,

Allocated share of loss value (and other costs) to the **first level consumers** is defined as first level cost (Cost$_1$) to be allocated to the same level consumers, so S$_{11}$ factor is multiplied by first level cost.

S2 = S22 × Cost2 + S22 × ((1 - S11) × Cost1),

Allocated share of loss value (and other costs) to the **second level consumers** consists of two components.

The first one defines the share of the second level cost (Cost$_2$) to be attributed to the same level consumers, so S$_{22}$ factor is multiplied by the cost allocated to the **second level**.

And the second component determines the **share of the first level cost (Cost$_2$) to be attributed to the second level consumers**. For this purpose, **the residual share of the first level cost** (not attributed to the first level consumers) is taken, from which the part is attributed to the second level that corresponds to the consumed energy share by the second level consumers in the total delivered energy from the same level.

S3 = S33 × Cost3 + S33 × ((1 - S22) × Cost2) + S33 × ((1 - S22) × (1 - S11) × Cost1),

Allocated share of loss value (and other costs) to the **third level consumers** consists of three components.

The first one defines the **share of the third level cost (Cost$_3$)** to be attributed to the same level consumers, so S$_{33}$ factor (that equals to 100%) is multiplied by the cost allocated to the **third level**.

And the second component determines the **share of the second level cost (Cost$_2$) to be attributed to the third level consumers** and is residual share of second level cost (not attributed to the second level consumers), that is totally attributed to the third level **(as S$_{33}$ = 100%).**

And the second component determines the **share of the first level cost (Cost$_1$) to be attributed to the third level consumers.** For this purpose, **the residual share of the first level cost** (not attributed to the first level consumers) is taken, from which the part is attributed to the third level consumer which was not attributed to the second level consumers.

In order to identify total energy delivered from each voltage level (C_1, C_2 and C_3) it is necessary to know the amount of total loss according to voltage levels (L_1, L_2 and L_3). In case when information about losses is total and its allocation by voltage levels is not available, then the regulator shall allocate the losses to voltage levels with maximum possible approximation based on available data.

Tariff Setting Methodology for Electricity Generation, Transmission, Dispatch and Electricity Market Operator Service

CHAPTER I. GENERAL PROVISIONS

Article 1

Purpose

1. Purpose of the Tariff Setting Methodology (thereafter "the Methodology") for Electricity Generation, Transmission, Dispatch and Electricity Market Operator service is to define rules and principles for calculating tariff for Electricity Generation, Transmission, Dispatch and Electricity Market Operator service in accordance with the Law of Georgia on Electricty and Natula Gas.
2. Based on this Methodology annual Tariff setting is in accordance with the "Cost Plus" regulation principle which stimulates stable functioning of the utility, recovery of reasonable costs and gain fair profit.

Article 2
Definitions

1. The terms used in methodlogy have the same meanining as in the Law of Georgia on Electricity and Natural Gas.
2. Other terms used in methodology for the tariff regulation purposes have the following meaning:
a) **Intangible assets** – identifiable, non-monetary assets without physical form including patent, trade mark, goodwilll, software, licence and other types of nonmaterial assets;
b) **Assets** – tangible and intangible assets;
c) **Asset replacement costs** - total amount of costs, which is needed to create the similar asset of the evaluated asset.
   d) **Asset cost** – the real value of payments in money or money equivalents or other compensation during the creation or the first purchase of an asset;
   e) **Historic cost asset valuation method** – Asset cost evaluation using the price of its creation or the first purchase
   f) **Electricity generation tariff of guaranteed capacity source**– Electricity price produced by guaranteed capacity source, in which costs related to electricity production are reflected except for the costs reflected in the guaranteed capacity costs;
   g) **Guaranteed capacity cost –** set tariff for providing state's Unified Electricity System with guaranteed capacity by guaranteed capacity source, which provides the

reimbursement of fixed operating costs and capital costs of the guaranteed capacity source;

h) **Reasonable costs** – cost incurred in accordance with the minimum cost principles, which is rational and nessesary for the effective functioning of the utility.

i) **Cost audit –** regulations mechanisms**,** by means of which the commission or/and neutral third party set reasonable costs incurred by the utility and define regulatory asset base;

j) **Cost cascading method** –allocation of the costs of the upper volage levels of the distribution grid to the costs of the next voltage levels;

k) **Electricity market operator service tariff –**the price of incurred service by the electricity market operator for qualified enterprises in accordance with the current legislation**;**

l) **Electricity transmission tariff**– price of the transmission service provided by the transmission licensee via the transmission grid for transmitting electricity to the consumer;

m)   **Electricity dispatch tariff** – the price of dispatching service provided by the dispatch licensee;

n) **Electricity Generation tariff –**price of electricity produced by the Generation licensee in which operating and capital costs are reflected related to electricity production by the generation licensee;

o) **Investment –**capital investment which is used for creating or rehabilitation of assets the useful life of which is more than one year;

p) **Weighted Average Cost of Capital (WACC) –** rate of return on Regulatory Assets Base, calculated before taxes, according to the capital structure of the company set by commission (own and attracted capital);

q) **Capital Costs (CAPEX) -** return on Regulatory Asset base and depreciation/amortization, for the purpose of this Methodology

r) **Tangible assets –** major assets used by the company for the regulated activity, including land, buildings, machinery, equipment and other main assets which useful life is more than one year;

s) **Third party-** any individual or legal person (including a State, customer, etc.), which provides subsidyto the utility, gives grant, pays fees for the connection to the electricity transmission network and/or gives tangible and intagible assets to the utility for free.

t) **Regulated activity** – for the purpose of this Methodology activities of the electricity generation, transmission, dispatching, electricity market operator service, providing guaranteed capacity by the guaranteed capacity source and electricity generation regulated by the Commission in accordance with the Law of Georgia on Electricity and Natural Gas;

u) **Regulatory Cost base (RCB) –** Allowed income for the utility set by the Commission for the Tariff Year, which is necessary for the effective functioning of the utility and includes reasonable costs and rational profit;

v) R**egulatory Assest Base (RAB) –** tangible and intangible assets used for the regulated activity, that are directly related to the regulated activity and are used in tariff calculation(except for the assets created by the third party);

w)**Building block approach** – defining the Regulatory Cost Base by the determination of its components.

x) **Tariff Year (t+1)** - the calendar year for which the Commission sets tariffs in accordance with this Methodology;

y) **Operational costs** –Operating and other costs related to the production, transmission and dispatching licensees and electricity market operator activity;

aa) **Test year (t-1)**–the calendar year prior to the tariff calculation year by the Commission;

bb) **Tariff application** – application form designed and approved by the commission, which includes financial and technical data for the Test Year of a company as well as investments made during the Test Year;

cc) **Utility** – production, transmission and dispatching licencees, also electricity market operator who are subject to tariff setting according to this Methodology in accordance with the current legislation for their regulated activities;

dd) **Tariff calculation year (t)-**the calendar year prior to the Tariff Year;

ee) **Fixed operational costs** – the operational costs of guaranteed capacity source which does not depend on electricity production by the guaranteed capacity source;

ff) **Depreciation/amortization –** systematic allocation of depreciable amount of the tangible/intangible asset over its useful life;

gg) **Variable operational costs** – the operational costs of guaranteed capacity source which depends on the electricity production by the guaranteed capacity source or the volume of produced electricity (including fuel cost, chemical reagents, etc);

hh) **Net book value** - asset cost minus accumulated depreciation.

Article 3

Main Principles

2. This Methodology and the tariffs set on its bases
   a)   protect consumers from the monopolistic prices;
   b)   support the stable and realible functioning of the company;
   c)   ensure that tariffs are transparent, stable and fair for the companies;
   d)   reflect different service costs between the customer categories;
   e)   cover costs of the company with funds recieved from each customer category in proportion to costs incurres for servicing this customer category.
3. For determination of RCB structure "building blocks" approach method is used. RCB defined by this methodology consists with the following components:
   A) Capital expenses;
   B) Operation expenses.

3. Calculation of Capital and Operation expenses is carried out by "cost-plus" method, with annual cost audit.

4. In case if result of the cost audit revealed corrective information of the previous years existed before test year, which was not identified in the previous year(s) tariff calculations, Commission has authority to use this information for correcting the results of the audit. Correction shall to be made by using principles outlined in Chapter IV of this methodology.

5. All tariffs set by the Commission are calculated without Value Added Tax (VAT).

Article 4
Tariff Setting Period

1. Accoridng to this Methodology tariffs are set from January 1, 2015.

2. GNERC is authorized to set tariffs annually for specific utilities on an individual bases and is valid from January1 till December31.

CHAPTER II

REGULATORY COST BASE

Article 5

Regulatory Cost Base for the Tariff Year

Regulatory Cost Base for the Tariff Year is calculated according to the following formula:

$$RCB(t+1)= CAPEX(t+1) + OPEX(t+1) + CORR(t+1) \quad (1)$$

Where,

RCB$_{(t+1)}$ - RCB for the Tariff Year(GEL);

CAPEX$_{(t+1)}$-Capital Costs for the Tariff Year(GEL);

OPEX$_{(t+1)}$- Operating Costs for the Tariff Year(GEL);

CORR(t+1) - Cost correction factor, which provides the reflection of the difference between actual and planned costs in the cost base of the Tariff Year, and also   received income from non-operational activity envisaged in the subparagraph "c" of paragraph 1 of Article 19 of this Methodology, based on the principles defined in this Methodology (GEL)

Article 6

Capital Expenditures

Capital expenditures for the Tariff Year are calculated according to the following formula:

$$CAPEX_{(t+1)}= RAB_{start(t+1)}* WACC + D_{(t+1)} \quad\quad (2)$$

where,

$CAPEX_{(t+1)}$- Capital Costs for the Tariff Year(GEL)

$RAB_{start(t+1)}$-RAB for the beginning of Tariff Year(GEL)

$WACC$ - Rate of return on the RAB for the tariff (%);

$D_{(t+1)}$ - annual depreciation for the Tariff Year(GEL)

Artilce 7

Regulatory Asset Base

15. For calculating the value of Regulated Assest Base, GNERC uses Historic Cost Valuation Method.

16. In case if the assets value can not be determined by the mothod specified in paragrah 1 of this article, Commission has the autority to use replacement cost asset valuation method.

17. In case if the utility sells regulatory assets to other utility, GNERC does not envisage asset re-sale value while calculating relevant tariffs.

18. The RAB includes the existing asset value including actually made investments.

19. The RAB shall not reflect:
    a) Those investments that were carried out by third party financing, companies should account for such assets separately;
    b) Those investments the company does not consider justified and reasonable;
    c) Assets that are not used in regulated activity;
    d) construction in progress.
    e) Goodwill, except goodwill which were formed during privatization of the state property.

20. The Commission will consider capitalized cost of the paid loan according to the factual annual interest rate for the long term loan taken to finance the construction during the construction process in the cost of asset defined in subparagraph D of paragraph 5 of this article, but the rate should not exceed the rate of debt (r_d) defined in this methodology.

21. Value of regulated assets base of utility is determined on the basis of the net book value engaged in this base.

22. For regulatory purposes GNERC is authorized to consider asset impairment while defining net book value of the asset. Thereby, the Commission is authorized to reflect asset impairment loss in tariff in some cases. Accounting of impairment loss shall be done separately by the utility.

23. RAB value at the beginning of the Tariff Year shall be determined based on the following formula:

$$RAB_{start}(t+1) = RAB_{end}(t-1) + INV_t - D_t \qquad (3)$$

where,

$RAB_{start(t+1)}$ - value of RAB at the beginning of the Tariff Year(t+1) (GEL);

$RAB_{end(t-1)}$ - value of RAB at the end of the Test Year (t-1) (GEL);

INV_t - actually made investments approved by GNERC for the Tariff Calculation Year(t) (GEL);

D_t -depreciation for the Tariff Calculation Year.

Artilcle 8

Depreciation and Amortization

4. GNERC applies the straight line method for determining the depreciation/amortization rates.
5. For the assets which were purchased or created after January 1, 2014,"Regulated Asset depreciation/amortization Rates for Regulated Utilities" shall be used approved by the commission.
6. With regard to assets purchased or created before January 1, 2014 GNERC is authorized to use depreciation/amortization rates defined in the tax code.

Article 9

Weighted Average Cost of Capital

1. Rate of Return on RAB is defined based on Weighted Average Cost of Capital (WACC) method.
2. The pre tax Weighted Avarege Cost of Capital (WACC) for the Tariff Year is calculated as follows:

$$WACC_{pre-tax} = g * r_d + \frac{(1-g)*r_e}{(1-T)} \qquad (4)$$

where,

$WACC_{pre\text{-}tax}$ - pre tax Wighted Average Cost of Capital (%)

g-   share of attracted capital (%)

r_d-   cost of borrowed capital (%)

r_e-   cost of own capital (%)

T-   profit tax (%)

3. Cost of attracted capital and own capital is calculated based on the following formula:

$$r_d = r_{rf} + DP \hspace{3cm} (5)$$
$$r_e = r_{rf} + \beta \times (r_m - r_{rf}) \hspace{2cm} (6)$$

where,

r_{rf}- risk free rate (%)

DP- debt premium (%)

r_m-   market risk (%)

β- sectoral risk factor.

4. The share of loans (g) of the total capital is 60 percent.

5. The commission will determine the long-term risk-free interest rate based on the annual income for the long-term international state bonds before the expiration date, and the market risk premium and the debt premium will be determined on the basis of expert opinion.

Article 10

Operational costs

1. Test Year data is used for calculation of operational costs for the Tariff Year.
2. For calculating operational costs for the Tariff Year operational costs for the Test Year which are justified, reasonable and fair is considered.
3. In case the utility does not have factual data for test year, the Commission is authorized to request from the utility technical and economic forecasting data for the Tariff Year by the tariff application. The Commission is authorized to consider only the data which is justified, reasonable and fair.
4. Operational costs should ensure the recovery of costs associated with the regulated activity, in particular:

     b) service and maintenance expenses;

     c) administrative and general expenses

5. Operational costs covers maintenance cost of fix assets financed by third party, including current repair, service and maintenance as well as other costs.

6. Operational costs covers reimbursement of the short-term loan interest that was borrowed for financing the working capital, which should not exceed average annual interest rate on the short term loans issued by commercial banks to legal entities.

7. For tariff calculation for the Tariff Year the Commission uses audited factual financial and technical data, including factual data for specific fuel cost, which should be submitted according to the Commission approved forms and the validity and accuracy of which should be verified by the head of the company or duly authorized person.

8. Within its mandate the Commission is authorized to verify the correctness of the submitted documentation, assess fairness and reasonableness of the costs submitted. For this purpose the Commission is authorized to assess operational costs for the test year based on operational cost analysis of the preceding year.

9. If in addition to the regulated activity as defined by this Methodology, the utility carries out other non-regulated activities, costs associated with that activity shall not be reflected in tariff calculation.

Article 11

Electricity normative loses

Cost of electricity normative loses in electricity transmission tariffs are envisaged in case if the service provided by the utility envisages such cost according to current legislation.

Article 12

Cost Distribution (Allocation)

6. If the utility carries out more than one regulated activity as well as non-regulated activity, it is obligated to present to the Commission unbundled data about costs and revenues for each regulated activity for the Test Year according to the Commission approved reporting forms.
7. The Commission sets transmission tariffs according to the voltage levels of the transmission grids of the utility.
8. Transmission licensee is obliged to allocate direct cost of the test year to the corresponding voltage levels. Non-direct costs should be also allocated to each voltage level and the licensee has to justify the reasonability and fairness of the allocation method.
9. The Commission is authorized to disagree with the non-direct cost allocation method (considering it unjust and unreasonable) and use another method of cost allocation.
10. For calculating the relevant tariff according to voltage levels, the Commission carries out cost allocation between voltage levels based on Cost Cascading Method. (Annex #1).

Chapter III. Tariff Calculation
Article 13
Amount of Electricity

For calculating tariffs the Commission utilizes forecast balance of approved electricity (capacity) or factual data of the Test Year.

Article 14
Electricity Generation Tariff

For calculating generation tariff of power plant for the Tariff Year RCB is divided by the electricity amount delivered at the bus-bar and is calculated according to the following formula:

$$T_{generation\ (t+1)} = \frac{RCB_{(t+1)}}{E_{Delivered\ (t+1)}} \ \ X\ 100 \tag{7}$$

Where,

$T_{generation\ (t+1)}$ -   Tariff for the electricity delivered at the power plant bus-bar for the Tariff Year (t+1) (tetri/kWh)

$RCB_{(t+1)}$ –   Regulatory Cost Base for the Tariff Year (t+1) (GEL);

$E_{Delivered}(t+1)$ –   Electricity amount delivered at the power plant bus-bar for the Tariff Year (t+1) (kWh)

Article 15
Guaranteed capacity cost and electricity generation tariff of guaranteed capacity source

1. For the guaranteed capacity source (generation licensee) two-step tariff is set which includes guaranteed capacity cost and electricity generation tariff of guaranteed capacity source.
2. Guaranteed capacity cost and electricity generation tariff of guaranteed capacity source is calculated based on the same principles and includes the same components as electricity generation tariff under the provisions in this article.
3. Guaranteed capacity cost provides the recovery of those fixed operational costs and capital expenses which are not directly related to electricity generation.
4. Guaranteed capacity cost is determined for each guaranteed capacity source on a daily basis.
5. Guaranteed capacity cost is calculated based on the following formula:

$$Q_{(t+1)} = \frac{OPEX_{fix(t+1)} + CAPEX_{(t+1)}}{N_{(t+1)}} \quad \textbf{(8)}$$

where,

$Q_{(t+1)}$ - Guaranteed capacity cost for the Tariff Year (t+1) (GEL/day);

OPEX $_{fix (t+1)}$ - Fixed operational expenses of the utility for the Tariff Year (t+1) (GEL);

CAPEX $_{(t+1)}$ – Capital expenses for the Tariff Year (t+1) (GEL);

$N_{(t+1)}$ - Planned number of standby days of guaranteed capacity source for the Tariff Year (t+1).

6. The number of standby days of guaranteed capacity source does not include the period (days) of planned repair and non-operating days which are planned by the utility and agreed with the dispatch licensee.
7. Electricity generation tariff of guaranteed capacity source reflects the costs directly related to electricity generation (including fuel cost, chemical reagents, and other costs defined by the legislation).
8. Electricity generation tariff of guaranteed capacity source is calculated according to the following formula:

$$T_{var(t+1)} = \frac{OPEX\ var_{(t+1)} + cEXC_{(t+1)} + cEFF_{(t+1)}}{E\ delivered_{(t+1)}} \ \textbf{X100} \quad \text{(9)}$$

Where,

$T_{var(t+1)}$ - Electricity generation tariff of guaranteed capacity source (tetri/kWh);

$OPEX_{var(t+1)}$ – Variable Operational Expenses of the guaranteed capacity source for the Tariff Year (t+1) (GEL);

$cEXC_{(t+1)}$ - Profit or loss resulted by the difference between planned and actual amounts of foreign currency exchange rate versus GEL at the moment of purchasing fuel (gas, masut, coal) for electricity generation by TPP and fuel purchasing price, which is calculated according to the rule described in paragraph 9 (GEL);

$cEFF_{(t+1)}$ - Profit or loss resulted by the difference between planned and actual amounts of specific cost of fuel (gas, masut, coal) for electricity generation by TPP, which is calculated according to the rule described in paragraph 10 (GEL);

$E_{Delivered(t+1)}$ - Electricity amount delivered at the power plant bus-bar (kWh);

9. Profit or loss resulted by the difference between planned and actual amounts of foreign currency exchange rate versus GEL at the moment of purchasing fuel (gas, masut, coal) for electricity generation by TPP and fuel purchasing price, which is calculated according to the following formula:

$$cEXC(t+1) = [aV_{(t-1)} \times (aEXC_{(t-1)} \times aP_{(t-1)} - pEXC_{(t-1)} \times pP_{(t-1)}] \times (1 + WACC_{(t-1)}) \times (1 + WACC_t)$$
$$(10)$$

where,

$aV_{(t-1)}$ - Actual amount of purchased fuel for the test year (t-1)(m^3);

$aP_{(t-1)}$ - Actual contract price for fuel purchase (1000 m^3 in foreign currency) for the test year (t-1) (GEL);

$pP_{(t-1)}$) – Planned contract price for the fuel purchase (1000 m^3 in foreign currency) for the test year (t-1) (GEL);

$pEXC_{(t-1)}$ – Planned exchange currency rate for the test year (t-1);

$aEXC_{(t-1)}$ – Actual exchange currency rate for the test year (t-1);

WACC - Rate of time value of the money, which is equal to WACC;

10.   Profit or loss derived from the difference of planned and actual values of specific cost for fuel (natural gas, masut, coal) necessary for generating electricity by the TPP is calculated as follows:

$$cEFF_{(t+1)} = [aE_{(t-1)} \times pP_{(t-1)} \times pEXC_{(t-1)} \times (aEFF_{(t-1)} - pEFF_{(t-1)})] \times (1 + WACC_{(t-1)}) \times (1 + WACC_t)$$
$$(11)$$

where,

$aE(t-1)$ -   Actual amount of delivered electricity at the bus-bar for the test year (t-1)(m^3);

$pP(t-1)$ - – Planned contract price for the fuel purchase (1000 m^3 in foreign currency) for the test year (t-1) (GEL);

$pEXC_{(t-1)}$ – Planned exchange currency rate for the test year (t-1);

$pEFF(t-1)$ - Planned specific cost of fuel for the test year (t-1) (m^3/kWh);

$aEFF(t-1)$ - Actual specific cost of fuel for the test year (t-1) (m^3/kWh);

WACC - Rate of time value of the money, which is equal to the WACC (%).

Article 16

Electricity Transmission Tariff

1. Electricity transmission tariffs are set for transmission activity for electricity transmission licensee.
2. Electricity transmission tariffs are set according to the following voltage levels of electricity transmission grid:
   a) For 500 kv voltage;
   b) For 400 kv voltage;
   c) For 220-110-35 kv voltage;
   d) For 6-10 kv voltage.

3. Transmission tariff for the Tariff Year is calculated according to the following formula:

$$T\, i\, _{Transm}(t+1) = \frac{RCBi_{(t+1)}}{Ei\, _{transmission(t+1)}} \qquad (12)$$

where,

$T\, i\, _{Transm}(t+1)$ - transmission tariff of i-level voltage (GEL/kWh);

$RCB\, _{i\,(t+1)}$ - regulatory cost base value of transmission licensee on i-level voltage for the Tariff Year (t+1) (GEL);

$E\, _{iTransm}(t+1)$ - Total amount of transmitted electricity in delivery points via transmission grid on i-level voltage, and while calculating the tariff of a new 400 kv transmission line for cross-border transit the total amount of exported electricity via this line (kWh);

i – corresponding level of transmission grid voltage.

3. For calculating the tariff envisaged in the paragraph 1 of this article, the Commission is authorized to consider received or receivable revenues from electricity transit through the territory of Georgia by the transmission licensee. In such case, the regulatory cost base of transmission licensee is reduced with received or receivable revenues from electricity transit.

Article 17

Electricity Dispatch Tariff

Dispatch tariff for the Tariff Year is calculated according to the following formula:

$$T\, _{dispatch}(t+1) = \frac{RCB_{(t+1)}}{E\, _{dispatch(t+1)}} x\, 100 \qquad (13)$$

Where,

T dispatch(t+1) - incurred service by dispatch licensee for the Tariff Year (t+1) (tetri/kWh);

RCB *(t+1)* - Regulatory Cost Base for the Tariff Year (t+1) (GEL);

E *dispatch(t+1)* - Amount of consumed (metered) electricity by the qualified enterprises in delivery points (kWh).

Article 18

Electricity Market Operator Tariff

1. Electricity Market Operator service tariff is defined for the service for which qualified enterprises pay service fee to electricity market operator according to current legislation, which is calculated according to the following formula:

$$T_{op}(t+1) = \frac{RCB_{(t+1)}}{E_{(t+1)}} x\ 100 \qquad (14)$$

where,
$T_{op}(t+1)$ - Electricity Market Operator tariff for the Tariff Year (t+1) (tetri/kWh);

$RCB_{(t+1)}$ - Regulatory Cost Base for the Tariff Year (t+1) (GEL);

$E_{(t+1)}$ - The amount of electricity for the Tariff Year for which Electricity Market Operator provides service for qualified enterprises during the tariff calculation year (kWh)

2. RCB of the Electricity Market Operator, based on the functional characteristics of the utility, is calculated according to this methodology by following formula:
$$RCB_{(t+1)} = (D_{(t+1)} + OPEX_{(t+1)}) \times (1+k) \qquad (15),$$

where,
   RCB(t+1) - RCB for the (t+1) Tariff Year(GEL);
   D(t+1) – depreciation for tariff year (GEL);
   OPEX(t+1) - Operating Costs for the Tariff Year (GEL);
   k – Profit rate related to cost, it is taken no more than 3 percent, which is defined by the Commission annually

3. Income received from import-export activity by the Electricity Market Operator, and also taxes and expanses received from this activity according to the current legislation, is not considered while calculating Electricity Market Operator tariff.

Chapter IV
Tariff Correction

Article 19

Tariff Correction Principles and Main Mechanisms

1. This methodology envisages the reflection of planned indicators (operational costs and electricity amounts) in the RCB while calculating tariff. Therefore, the Commission is authorized to carry out the tariff correction with Cost Correction Factor for the Tariff Year, which is based on the following:
   a) operational costs
   b) amount of electricity
   c) profit from non-operational activity.

2. Cost Correction Factor is calculated as follows:

$$CORR(t+1) = cOPEX(t+1) - cREV(t+1) - nopREV(t+1) \qquad (16)$$

where,

CORR(t+1) - Cost Correction Factor for the Tariff Year (t+1)(GEL);

cOPEX(t+1) - difference between planned and actual operational costs for the test year(t-1), reflected in the Tariff Year (t+1)(GEL);

cREV(t+1) - Difference between planned and actual revenues for the test year(t-1), according to the correction principles in the article 20 of this Methodology, reflected in the Tariff Year (t+1)(GEL);

nopREV(t+1) - profit gained by the utility from the utilization of assets in non-regulated activities reflected in RAB and selling of assets out of service, also positive difference from the connection of new consumers to the electricity transmission line of the utility, and also funds received for financing operational costs from the third party in the test year (t-1)(GEL).

Article 20

Correction of operational costs

1. If actual operational costs incurred by the utility for the Tariff Year differs from the operational costs envisaged while setting relevant tariff, then the Commission ensures the correction of RCB according to the following formula:

$$cOPEX_{(t+1)} = [(aOPEX_{(t-1)} - pOPEX_{(t-1)}) \times (1 + WACC_{(t-1)}) \times (1 + WACC_t) \quad (17)$$

where,

$cOPEX_{(t+1)}$ **-** Corrected amount of operational costs for the period of (t+1) (GEL);

$aOPEX_{(t-1)}$ - Actual amount of operational costs for the period of (t-1) (GEL);

$pOPEX_{(t-1)}$ - Planned amount of operational costs for the period of (t-1) (GEL);

WACC – Rate of time value of the money, which is equal to the WACC (%).

2. While correcting operational costs of the Electricity Market Operator, the Commission does not consider time value rate and it is calculated based on the following formula:

$$cOPEX_{(t+1)} = aOPEX_{(t-1)} - pOPEX_{(t-1)} \qquad (18)$$

Article 21

Revenue Correction with Actual Amount of Electricity

1. If the actual delivered, transmitted and dispatched electricity by the utility differs from the planned amounts, the Commission provides the correction of RCB according to the following formula:

$$cRev_{(t+1)} = [(aE_{(t-1)} - pE_{(t-1)}) \times T_{(t-1)}] \times (1 + WACC_{(t-1)}) \times (1 + WACC_t) \ (19)$$

where,

$cRev_{(t+1)}$ – Corrected cost of revenues for the period of (t+1) (GEL);

$aE_{(t-1)}$ - Actual amount of delivered, transmitted and dispatched electricity in the grid for the period of (t-1) (GEL);

$pE_{(t-1)}$ **-** Planned amount of delivered, transmitted and dispatched electricity in the grid for the period of (t-1) (GEL);

$T_{(t-1)}$ - tariff for the period of (t-1) (GEL);

WACC – Rate of the time value of the money, which is equal to the WACC.

2. Correction mechanism defined in the paragraph 1 is applied to that amount of electricity transmitted to the network by TPP, which is not guaranteed capacity source.

3. The Commission does not consider correction mechanism defined in the paragraph 1 of this article if actual amount of the delivered and transmitted electricity shortage in the grid with respect to the planned is due to the utility.

4. While correcting the amount of electricity and the guaranteed capacity for which the Electricity Market Operator tariff is calculated under current legislation, the Commission does not use time value rate and it is calculated according to the following formula:

$$cRev(t+1) = (aE(t-1) - pE(t-1)) \times T(t-1) \qquad (20)$$

CHAPTER V

TARIFF SETTING AND APPLICATION SUBMISSION PROCEDURES

Article 22

Accounting and Reporting

4. For the regulated purposes the utility is obligated to carry out its financial accounting and reporting based on the Uniform System of Accounts approved by the Commission, according to current legislation.

5. If the utility carries out more than one regulated activity as well as non–regulated activity, it is obligated to unbundle its revenues, costs and financial accounts for each regulated activity.

6. The utility should submit information about assets created by the consumer financing separately as requested by this Methodology.

Article 23

Required Documents for Tariff Setting

6. For the purpose of tariff setting for each Tariff Calculation Year utility has to submit the tariff application in the Commission.
7. Tariff application and data forms, as well as a list of documents to be submitted along with the tariff application are determined by individual administrative - legal act of the Commission.
8. Along with the Tariff application the utility shall also submit the following documents prepared and audited in accordance with the IFRS:
   a) Balance Sheet
   b) Profit and Loss Statement
   c) Cash Flow Statement
9. The Commission is authorized to request from the utility other additional information if finds appropriate.
10. The responsibility on the accuracy of the information contained in the tariff application lies on the party submitting the application.

Article 24

Tariff Setting Timeline and Procedures

1. The utility is obliged to submit tariff application to the Commission no later than 150 days prior to the expiry of the existing tariff.

2. The Commission reviews the compliance of tariff application with the approved form and its completeness within three days upon submission.

3. If the Commission finds tariff application incomplete or it does not correspond with the approved form, it sets the deadline in written form of no more than 45 days for amending this. This period shall be extended only once at the request of the applicant, for no more than 15 days.

4. If the tariff application is not submitted in time defined in paragraph 3 of this Article, it remains unconsidered according to the decision of the Commission. If unconsidered tariff application was submitted due to legislation, sanctions shall be imposed on the company in accordance with the law.

5. The Commission is authorized to make a relevant decision and review the utility's tariffs on its own initiative. In this case the provisions of submitting necessary information and documentations are determined by the relevant decisions of the Commission.

6. Upon acceptance of properly submitted application and in case of paragraph 5 of this Article, the Commission starts public administrative proceedings and the notice shall be published on the Commission web site.

7. Tariff application is reviewed according to public administrative proceeding rule under Georgian legislation. Therefore, tariff application and enclosed documents (except for personal information relating to identifiable persons, as well as commercially confidential information considered by the Commission) are public and shall be available to any interested party.

8. All the interested parties are authorized to get familiar with materials presented to the Commission and provide their comments.

9. Comments on the tariff application shall be submitted in written form and shall include justified argumentations. In addition, the interested party is entitled not to indicate the identity while submitting own comments, the copy of comment shall be sent to tariff applicant, and the opinions are reviewed at the public hearing of tariff application.

10. In the process of reviewing the tariff application, the Commission is authorized to request submitting of additional documentation or different types of conclusions from the utility.

11. In the process of reviewing the tariff application before reaching the final decision, the Commission is authorized to organize meetings and/or public hearings for the review of the tariff application.

12. Applicant shall be notified about the time and venue of the public hearing seven days in advance.
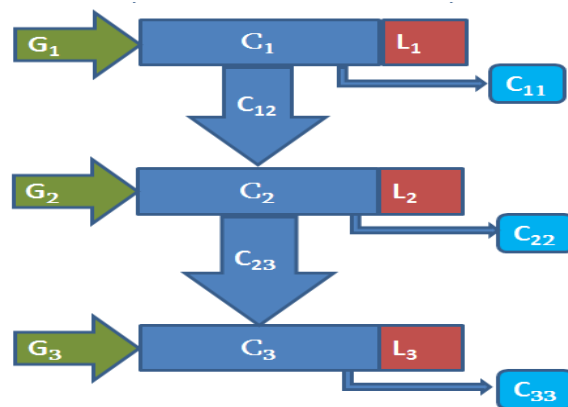
CHAPETR VI

TRANSITIONAL PROVISIONS

Article 25

Transitional Provisions

1. The values of the components of Weighted Avarege Cost of Capital (WACC) are defined as follows:
    1. Risk free rate r_{rf} - 7.50 %
    2. Debt premium (DP) - 3.50 %
    3. Market risk premium (r_m- r_{rf}) - 7.25%
    4. Sectorial risk factor (β) – 1.00

2. For the utilities, tariffs of which are set by the Commission including August 31, 2014, tariffs shall be set from September 1, 2014 including December 31, 2015 under this Methodology;

3. Corrections envisaged in the Chapter 4 of this Methodology shall be carried out from 2016 (except for the corrections by profits gained from non-operational activities envisaged in subparagraph "C" of paragraph 1 of article 19 of this Methodology) on yearly basis.

Cost Cascading Method

Cost Cascading (allocation) mechanism of allocating different voltage levels to the consumers (2nd stage of cost allocation), according to the energy consumption by voltage levels:

G1 – Energy supply from Generation to the first level

G2 – Energy supply from Generation to the second level

G3 – Energy supply from Generation to the third level;

L1 – Total losses on the first level;

L2 – Total losses on the second level;

L3 – Total losses on the third level;

C_{11} – Delivered energy to the first level consumers (consumption on the first level);

C_{12} – Energy supply from first level to the second level;

$C_1 = C_{11} + C_{12}$, Total delivered energy from the first level (G1 - L1);

C_{22} – Delivered energy to the second level consumers (consumption on the second level);

C_{23} - Delivered energy to the second level from the third level;

$C_2 = C_{22} + C_{23}$, Total delivered energy from the second level (G2 + C12 - L2);

C_{33} - Delivered energy to the third level consumers (consumption on the third level);

$S_{11} = C_{11}/ C_1$ - Energy share consumed by first level consumers in the total delivered energy from this level

$S_{22} = C_{22}/ C_2$ - Energy share consumed by second level consumers in the total delivered energy from this level

$S_{33} = C_{33}/ C_3$ - Energy share consumed by third level consumers in the total delivered energy from this level

Cost Cascading (allocation) mechanism is based on energy consumptions on separate voltage levels

S1 = S11 × Cost1 ,

Allocated share of loss value (and other costs) to the **first level consumers** is defined as first level cost (Cost1) to be allocated to the same level consumers, so S_{11} factor is multiplied by first level cost.

S2 = S22 × Cost2 + S22 × ((1 - S11) × Cost1),

Allocated share of loss value (and other costs) to the **second level consumers** consists of two components.

The first one defines the share of the second level cost (Cost2) to be attributed to the same level consumers, so S_{22} factor is multiplied by the cost allocated to the **second level**.

And the second component determines the **share of the first level cost (Cost2) to be attributed to the second level consumers**. For this purpose, **the residual share of the first level cost** (not attributed to the first level consumers) is taken, from which the part is attributed to the second level that corresponds to the consumed energy share by the second level consumers in the total delivered energy from the same level.

S3 = S33 × Cost3 + S33 × ((1 - S22) × Cost2) + S33 × ((1 - S22) × (1 - S11) × Cost1),

Allocated share of loss value (and other costs) to the **third level consumers** consists of three components.

The first one defines the **share of the third level cost (Cost$_3$)** to be attributed to the same level consumers, so S$_{33}$ factor (that equals to 100%) is multiplied by the cost allocated to the **third level**.

And the second component determines the **share of the second level cost (Cost$_2$) to be attributed to the third level consumers** and is residual share of second level cost (not attributed to the second level consumers), that is totally attributed to the third level **(as S$_{33}$ = 100%).**

And the second component determines the **share of the first level cost (Cost$_1$) to be attributed to the third level consumers.** For this purpose, **the residual share of the first level cost** (not attributed to the first level consumers) is taken, from which the part is attributed to the third level consumer which was not attributed to the second level consumers.

In order to identify total energy delivered from each voltage level (C$_1$, C$_2$ and C$_3$) it is necessary to know the amount of total loss according to voltage levels (L$_1$, L$_2$ and L$_3$). In case when information about losses is total and its allocation by voltage levels is not available, then the regulator shall allocate the losses to voltage levels with maximum possible approximation based on available data.

Regulated assets depreciation/amortization rates of utilities under tariff regulation

1. The following rates of regulated assets depreciation/amortization are used for the assets created or purchased by the utilities under tariff regulation after January1, 2014:

I	Common assets	Annual rate of Depreciation/ Amortization (%)	Useful life (year)
1	Transport facilities	3.3	30
2	Operational buildings	1.8	55
3	Administrative building	1.5	65
4	Substation Building	2.2	45
5	Warehouse areas	5.0	20
6	Furniture and moving inventory	10.0	10
7	IT and office equipment	20.0	5
8	Instruments / Equipments	10.0	10
9	Light vehicles	12.5	8
10	Heavy vehicles and special techniques	8.3	12
11	Intangible Assets	20.0	5

II	Stations	Annual rate of Depreciation/ Amortization (%)	Useful life (year)
12	TTP		
12.1	Condensing power plants	4.0	25
12.1.1	Thermotechnical part	4.0	25
12.2	Gas turbine	3.3	30

12.3	Ancillary Facilities (Water preparation, Fuel preparation and etc.)	4.0	25
12.4	Environmental Equipment	6.7	15
12.5	Building (Chimney, Scatter Refrigerator, Fuel Storage and etc.)	2.2	45
13	HPP		
13.1	Accumulative structures	1.7	60
13.2	Dam, Head building, diversion and other hydrotechnical buildings	2.2	45
13.3	Other equipments and facilities of HPP	3.3	30
14	Wind Power Plant	4.0	25
15	Solar Power plant	4.0	25
16	power unit	4.0	25
17	Protective, metering devices, remote control, telecommunication, remote meters and automated devices	4.0	25
18	Power units of power plants, including transformers, Commutation and Distribution facilities	2.2	45
19	Other Electric facilities of Power Plant	4.0	25

III	Grid Components	Annual rate of Depreciation/ Amortization (%)	Useful life (year)
20.1	Overhead lines (500 -400 - 330 - 220 - 110 kV)	2.2	45
20.2	Power units of substations, including transformers, Commutation and Distribution facilities	2.5	40
20.3	Protective, metering devices and protection from over voltage , remote control, telecommunication, and automated devices	4.0	25
20.4	Other	4.0	25
21	35–10–6–3.3 kV		

21.1	Overhead lines (35–10–6–3,3 kV)	2.9	35
21.2	Underground lines (35–10–6–3,3 kV)	2.5	40
21.3	Power units of medium voltage substations, including transformers, Commutation and Distribution facilities	2.9	35
21.4	Protective, metering devices and protection from over voltage , remote control, telecommunication, and automated devices	4.0	25
22	To 1 kV		
22.1	Overhead lines (to 1 kV)	2.9	35
22.2	Underground lines (to 1 kV)	2.5	40
22.3	Protective, metering devices and protection from over voltage , remote control, telecommunication, and automated devices	2.9	35
23	Meters	5.0	20
24	Converters , HVDC, Compensatory Devices	4.0	25
25	Telephone lines	2.9	35
26	Stationary Crane, freight elevators, outdoor lighting and other ancillary equipments	3.3	30