RULES REGARDING THE LABELLING OF ELECTRIC POWER SUPPLIED TO CONSUMERS

Contents

CHAPTER I
General dispositions

Scope

Art.1. The present rules set:

a) The minimum requests for the suppliers in relation with how to make and send the labels regarding the primary energy sources used for the generation of electric power which they supply, as well as regarding the polluting emissions subsequent to these sources;
b) The requests for the electric market operator regarding the way it is established and published the origin of the energy making the object of transactions on the Day Ahead Market (PZU);
c) Requests for the producers in relation with the way they establish and send the data regarding the structure of the total quantity of electric power sold, from point of view of primary energy sources as well as polluting emissions that may result, to the suppliers to whom they supply electric power, to the electric power market operator and to the competent authority.

Art.2. The present rules ensure the implementation, based on minimum costs, of the system for labelling the electric power supplied to the consumers.

Art.3. The electric power labels are edited and transmitted by the electric power suppliers to the consumers with whom they concluded contracts for supply, on purpose of:

a) Reaching a high level of consumers' information so that they may choose the supplier;
b) Increasing transparency on the electric power market;
c) Promoting the renewable sources of energy (SRE) and green technologies;
d) Reducing the impact of the electric power sector over the environment.

Field of application

Art.4. The present rules apply to the owners of supply license or to the owners of producers having a right to supply electric power who, based on the rights the licenses give to them, concluded contracts for supply of electric power during the period of reference.

Art.5. The producers of electric power, the electric power market operator and the competent authority see that all the obligations they have based on these rules are applied, with the purpose of accomplishing an operational system for labelling the electric power.

Definitions and abbreviations

Art.6. The terms and abbreviations used within the present rules have the following meaning:

1. The competent authority – The National Regulatory Authority for Energy – ANRE;

2. Specific CO_2 emissions – quantity of carbon dioxide resulting from the generation of one unit of electric power, expressed in g/kWh;
3. The electric power produced from renewable sources of energy – electric power produced by electric power plants which use only renewable sources of energy, as well as the ratio of electric power produced from renewable sources of energy in the hybrid electric power plants which also use conventional sources of energy, including the electric power consumed by the stocking systems of the conventional energy carriers and excluding the electric power obtained from these systems;
4. The green energy – the electric power produced from renewable sources of energy (SRE);
5. Electric power labelling – all activities carried out by a supplier of electric power with the purpose of informing its existing or potential clients, transparently, upon the contribution of each source of primary energy at the generation of the power supplied, as well as upon the impact over the environment;
6. Electric power label – a document that specifies the structure of the primary sources of energy used for the generation of the electric power supplied and which offers information related to the impact of the respective sources over the environment;
7. Suppler of electric power – the legal entity, owner of license for supply, which supplies one or more consumers with electric power, based on a contract for supply;
8. Reference period for labelling – the previous calendar year;
9. "The supplier's portfolio of primary sources" – the convention based on which, it is associated to a supplier, for a certain period of reference, a picture regarding the contribution of primary sources of energy used for the generation of the electric power traded by the respective supplier, similar to the supplier's structure of acquisitions;
10. The producer of electric power – the physical or legal entity, owner of a license referring to the activity of electric power generation;
11. Electric power range – offer of a supplier for the sale of electric power characterized by a structure of primary sources used, which may be different from the structure of primary sources afferent to the total power traded by the respective supplier. For example: the range of green electric power, the range of electric power which does not contain nuclear power etc.;
12. Electric power certificate of origin – the offering, by the supplier, of information to the clients, with regard to the structure of the electric power supplied within the reference period, from point of view of primary sources of energy used;
13. Renewable sources of energy – renewable sources of non-fossil power such as: wind power, sun power, geo-thermal power, wave power, tide power, hydro power, bio-mass, waste materials' fermentation gas also called deposit gas, mud fermentation gas from the installations of used water filtering and biogas;
14. Labelling system type "supplier's portfolio" – the labelling of the total quantity of electric power supplied, without separating it in categories; so, one label corresponds to the electric power supplied by a supplier for a given reference period;
15. Labelling system type "supplier's portfolio plus category" – a system based on which the suppliers may offer the clients categories of electric power. In this

case, the supplier must mention in the label both the structure of primary sources used to obtain a certain category and the structure of primary sources used in order to obtain the entire quantity of power traded by the respective supplier. A number of distinctive labels equal to the number of categories offered correspond to a supplier for a certain period of reference. A client is entitled to receive only the label which refers to the category he is purchasing;

16. PZU – The Day Ahead Market;
17. SO – specification of electric power origin;
18. SRE – renewable sources of energy.

CHAPTER II
Reference Documents

Art.7. The present rules rely upon the provisions of the following reference documents:

a) The Law of Electric Power no.318/2003;
b) The Government Decision no. 1007/2004 regarding the approval of the Rules for the supply of electric power to consumers;
c) The Government Decision no. 443/2003 regarding the promotion of electric power produced from renewable sources of energy;
d) The Government Decision no. 1535/2003 regarding the approval of the Strategy for capitalization of the renewable sources of energy;
e) The licenses for the generation and supply of electric power issued by the competent authority;
f) The license for administration of the wholesale market of electric power issued by the competent authority.

CHAPTER III
Principles

Art.8. The labelling of the electric power is mandatory and it is done for the entire quantity of electric power supplied during the period of reference.

Art.9. The system of labelling the electric power is of a retroactive type (ex-post).

Art.10. The suppliers use only the electric power labelling system type “supplier’s portfolio”.

Art.11. The supplier sends the electric power label to the clients it serves only once a year.

Art.12. The information contained in the label must be clear, brief and suggestive.

CHAPTER IV
Format and contents of the electric power label

Art.13. (1) The suppliers will make the electric power labels as per the model in Annex 1.

(2) For the labelling system type “supplier’s portfolio”, the label elaborated by a supplier for a period of reference is unique.

Art.14. The mandatory information to be included in a supplier’s electric power label are:

(1) the contribution of each primary source of energy, no matter if it may be equal to zero or not, to the portfolio of primary sources of energy of the supplier, corresponding to the period of reference;
(2) at least one reference to public sources of information detailing the impact on the environment in case of using the primary sources from paragraph (1) in relation with:
    a) The specific emissions of CO_2, resulting from the generation of the electric power supplied throughout the period of reference;
    b) The radioactive wastes resulting from the generation of electric power supplied throughout the period of reference.

Art.15. The electric power labels will be in coloured form.

Art.16. (1) The contributions mentioned at Art.14 paragraph 1 will be expressed in percentage from total quantity of electric power supplied by the supplier to its clients, during the period of reference.

(2) The specification of origin for the electric power supplied is done based on categories of primary sources of energy as mentioned in Annex 2.

CHAPTER V
How it is determined the structure for generation of the electric power which is object of transactions

Art.17. The supplier will edit the label in a number equal to the number of its own clients and mails it to its clients by April 15th, the year following the period of reference.

Art.18. The supplier is obliged to put at the disposal of any potential client, at his request, a copy of its label, for the last period of reference and this will be done either by mail, by posting it at the supplier’s centre for relations with the clients or in person, through one of its representatives.

Art.19. The supplier sends a coloured copy of its label to the competent authority, by April 15th, the year following the period of reference.

Art.20. On the date the present rules come in force, the period of reference is the calendar year.

The electric power traded based on contracts

Art.21. The electric power producers will transmit, by January 31st of the year following the reference period for labelling, statements made according to the model in Annex 4, referring to the total quantity of power sold by producer and to the primary sources of energy used during the period of reference:

a) to the suppliers with whom they concluded contracts for sale/purchase (regulated of negotiated) during the period of reference;
b) to the competent authority;
c) to the electric power market operator.

Art.22. For a producer, the statements sent to the suppliers with whom he made transactions during the period of reference, are identical.

Art.23. (1) The electric power producers will send to the suppliers the statements mentioned at Art.21, without filling in the column referring to electric power quantities.
(2) The electric power producers will send to the competent authority and the electric power market operator the statements mentioned at Art.21 totally filled in.

Art.24. In order to determine its own structure of acquisition, each supplier who had transactions with a producer during the period of reference will consider the structure of primary sources specified in the statement of the producer, for the quantity of electric power purchased from the producer.

Art.25. The public competent authority on the electronic page www.anre.ro, by February 15th the year following the period of reference for labelling, will publish the following information:
a) the structure of the Romanian electric power production based on types of primary sources of energy;
b) the values of the specific CO_2 emissions, resulting from the generation of electric power in Romania, for each type of primary source;
c) the structure of electric power production in the European Union based on types of primary sources of energy.

Art.26. In case the data afferent to the period of reference for the information provided by letters “b” and “c” from Art.25 are not available, the most recent data available will be published.

The electric power traded on the Day Ahead Market

Art.27. The electric power market operator will calculate and transmit, by February 15th the year following the period of reference for labelling, to each supplier who purchased power from the Day Ahead Market in the period of reference and to the competent authority, the following information:
a. the structure of the energy traded on the Day Ahead Market, considering the primary sources of energy used, separated according to the categories specified in the table from Annex 2 (the portfolio of primary sources of the Day Ahead Market)
b. the impact of the total power purchased by suppliers from the Day Ahead Market upon the environment, by multiplying the percentages from letter “a” with the specific emissions of carbon dioxide, based on types of primary sources and then by summing up these values. The information published as per Art. 25 b regarding the specific emissions of carbon dioxide will be used for this calculation.

Art.28. (1) The structure of electric power traded on the Day Ahead Market is calculated considering for each producer the total quantity of electric power sold on the Day Ahead Market during the period of reference and the structure of the primary sources of energy used by the respective producer in the same period.

(2) For each producer who sold electric power on the Day Ahead Market, it will be considered the structure of primary sources for generation communicated as per Art.21 letter “c”;

(3) The quantity of electric power sold on the Day Ahead Market by other participants to the market than the producers from Romania will not be considered when calculating the structure of electric power traded on the Day Ahead Market.

Art.29. The electric power market operator will publish on its electronic page, by January 31st the year following the period of reference for labelling:

a) the information provided for at Art.27;
b) the total energy quantity from domestic production, traded on the Day Ahead Market in the period of reference;
c) the quantity of electric power traded on the Day Ahead Market in the period of reference, by other participants to the market than the producers from Romania.

Art.30. The generation structure established by the market operator for the electric power traded on the Day Ahead Market during the period of reference, calculated as per Art.27 a, is used by all suppliers who purchased electric power in the respective period, no matter what is the moment of acquisition.

The electric power purchased from import

Art.31.(1) For the electric power imported, it is not necessary to know the structure of the sources of primary energy used for the generation of the respective quantity.

(2)The rate of electric power quantities from import (directly imported or imported through the Day Ahead Market) in the acquisition portfolio of a supplier will be distinctly highlighted on the respective supplier’s label, mentioning it is an un-labelled quantity.

How it is calculated the structure of acquisition for the electric power supplied

Art.32. For the total quantity of electric power purchased from producers and from the Day Ahead Market, a supplier will determine:

a) the contribution of each primary source in generating the respective quantity of electric power;
b) the value of the specific CO_2 emissions, determined by multiplying the percentages from Art.14 with the average specific emissions per types of primary sources, as published on the electronic page of the competent authority and the summing up of the resulting values, as per Annex 3. The result will be 0065pressed in g/kWh;
c) the value of the radioactive waste materials, determined by multiplying the contribution of nuclear power by the specific consumption of nuclear fuel, as per Annex 3. The result will be expressed in g/kWh.

Special cases

Art.33. In case a supplier does not have the relevant documents regarding the origin of a quantity of electric power purchased from the producers or suppliers in Romania and, consequently, it cannot attribute to it a structure of primary sources, the supplier will consider the respective quantity of electric power as per the category “other conventional sources”, according to Annex 2.

CHAPTER VI
Monitoring the information comprised in labels

Art.34. The competent authority will monitor the system of labelling the electric power.

Art.35. The supplier will send to the competent authority, by April 30th the year following the period of reference, the calculation record based on which it made the labelling of the supplied electric power.

Art.36. The supplier will put at the disposal of the competent authority, at request, the documents based on which it made the calculation record for labelling the electric power.

CHAPTER VII
Publishing the Information on the Internet

Art.37. (1) The supplier who, on the date of issuing these rules, does not have an electronic page, has the obligation to make its own electronic page by July 1, 2005, and to periodically update it, mentioning the date of the latest updating on the electronic page.

(2) The supplier notifies the competent authority upon any modification of its own electronic page address.

Art.38. The supplier will publish the electric power label on its electronic page by 15th of April, the year following the period of reference.

CHAPTER VIII
Final and transitory dispositions

Art.39. For the period of reference 2004 and 2005, the suppliers may make simplified labels, which contain strictly the information from Art.32 letter “a”, respectively the structure of the portfolio of primary sources afferent to the electric power supplied.

Art.40. By January 31, 2005, SN Nuclearelectrica SA will transmit to the competent authority, for approval, the Calculation Methodology in relation with the radioactive waste materials.

Art.41. The electric power labels are valid and they cannot be modified by other suppliers until the issuance of the label for the next period of reference.

Art.42. The form, the contents of the labels, the frequency of their transmission to the serviced clients may be modified based on order of the president of the competent authority.

Annex 1
To the Rules

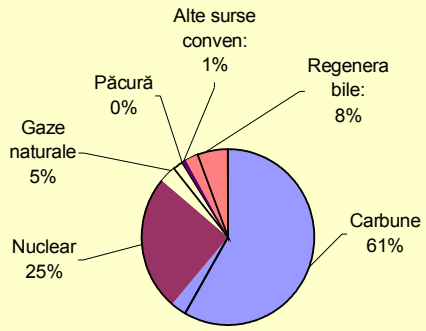
Example of labelling the electric power

ETICHETA ENERGIE ELECTRICA

Furnizorul: **Furnizor X**
Telefon: **0800 - xxxxxxxxxx**
Site Internet: www.furnizor-x.ro

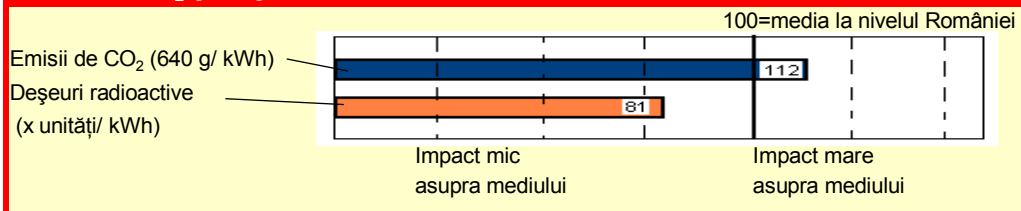
Energie electrica furnizata de furnizorul X, 2003

Energia electrica furnizată de furnizorul X a fost produsă din urmatoarele surse:



Sursa primară de energie	Furnizor	Productie energie electrică România
Cărbune	**61%**	**41%**
Nuclear	**25%**	**9%**
Gaze naturale	**5%**	**11%**
Păcură	**0%**	**15%**
Alte surse conventionale	**1%**	**0,0%**
Regenerabile:	**8%**	**24,0%**
Hidroelectric	8,0%	24,0%
Eolian	0,0%	0,0%
Biomasa	0,0%	0,0%
Solar	0,0%	0,0%
Alte regenearabile	0,0%	0,0%
15 % din enegia vanduta de furnizorul X este din import şi nu este cuprinsă în detalierea de mai sus		

Emisii de CO_2 şi deşeuri radioactive



Norm EN - Directiva Europeana 2003/54/EC
HG 1007/2004 Regulament de furnizare a energiei electrice

Legend:
Title: ELECTRIC POWER LABEL
Top Left: Supplier Top Right: Supplier X
Phone 080xxxxxx
Internet Site www.supplier-x.ro
Eectric power supplied by supplier X, 2003
The pie represents the graphic for the schedule on the right part

Primary Source of Energy	Supplier	Electric power production Romania
Coal	61%	41%

Nuclear	25%	9%
Natural gas	5%	11%
Mazout	0%	15%
Other conventional sources	1%	0.0%
Renewables	8%	24,0%
Hydroelectric	8,0%	24,0%
Wind	0,0%	0,0%
Biomass	0,0%	0,0%
Sun	0,0%	0,0%
Other renewables	0,0%	0,0%
15% of the energy sold by supplier X is from import and is not comprised in the above detailed table		

CO2 emissions and radioactive waste materials 100=average at level of Romania

CO2 emissions

Radioactive waste materials

(x units/kWh) Small impact On environment Big impact on environment

Norm EM – European Directive 2003/54/EC

Gov.Decision 1007/2004 Rules for the supply of electric power

ANNEX 2
To the Rules

Form of table explaining "the portfolio of primary sources of a supplier"

Primary source of energy	**Supplier X**	**Electric power production (the average at level of Romania)**
Coal	…%	…%
Nuclear	…%	…%
Natural gas	…%	…%
Mazout	…%	…%
Other conventional sources	…%	…%
Total renewable sources of energy, of which	…%	…%
Hydro	…%	…%
Wind	…%	…%
Biomass	…%	…%
Sun	…%	…%
Other renewable sources	…%	…%
…% of the energy sold by the supplier (name of the supplier) is from import and it is not comprised in the above-mentioned detailing		

ANNEX 3
To the Rules

Calculation record

Establishing the contributions of the primary sources to the generation of the electric power supplied

Considering that a supplier f_1 purchases during the period of reference, per total contracts, the following quantities:

c^{p1} of electric power from the producer p_1 ,
c^{p2} of electric power from the producer p_2,
……
c^{pn} of electric power from producer p_n ,

and it also purchases the quantity
c^{PZU} of electric power from the PZU

then the quantity c^{pk} purchased by the supplier f from the producer p_k from its own production, results from summing up the quantities of energy generated by the producer p_k out of each primary source, as follows:

$$c^{pk} = c_1^{pk} + c_2^{pk} + c_3^{pk} + c_4^{pk} + c_5^{pk} + c_6^{pk} + c_7^{pk} + c_8^{pk} + c_9^{pk} + c_{10}^{pk}$$

where: 1=coal; 2=nuclear; 3=natural gas; 4=mazout; 5=other conventional sources; 6=hydro; 7=wind; 8=biomass; 9=sun; 10=other renewable sources.

Then the contribution of the primary energy source j to the portfolio of the supplier f_1 is given by the following formula:

$$x_j = (c_j^{PZU} + \sum_{k=1}^{n} c_j^{p_k}) \cdot 100 / (c^{PZU} + \sum_{k=1}^{n} c^{p_k}) \quad [\%]$$

k – indicator designating the producer

j – indicator designating the primary source of energy

How the environment indicators are established

The specific CO2 emissions

The total CO2 emissions resulting from the generation of electric power $c_{f_1} = \sum_{k=1}^{n} c^{p_k}$

are:

$$e = \sum_{j=1}^{9} x_j e_j \quad [\text{g/kWh}]$$

Where e_J represents the emissions resulting from the use of the primary source of electric power j in order to generate 1 kWh, values which are calculated by the competent authority based on the statements done by the producers and which are published on its electronic page.

Annex 4
To the Rules

The producer's statement in order to accomplish electric power labelling (model)

Producer:
Tel:
Fax:
Internet address:
Email address:
Director:
Contact person:
Period of reference for labelling:

Type of sourse	**Electric power**		**Specific emissions of CO_2 per total producer resulting from generationof electric power**
1	2	3	4
	GWh**	%	g/kWh
Coal	(a)	(a) •100/(g)	
Nuclear	(b)	(b) •100/(g)	
Natural gas	(c)	(c) •100/(g)	
Mazout	(d)	(d) •100/(g)	
Other conventional sources *	(e)	(e) •100/(g)	
Total SRE of which:	(f)	(f1) •100/(g)	
Hydro	(f1)	(f1) •100/(g)	
Wind	(f2)	(f2) •100/(g)	
Biomass	(f3)	(f3) •100/(g)	
Sun	(f4)	(f4) •100/(g)	
Other renewables	(f5)	(f5) •100/(g)	
TOTAL own production	(g)=(a)+(b)+(c) +(d)+(e)+(f)	100%	
Import	(imp)	=(imp)•100/(g)	
Export	(exp)	=(exp)•100/(g)	

Electric power supplied to grid	(h)=(g)+(imp)-(exp)	100%

Radioactive waste materials per total producer resulting from generation of electric power (g/kWh)	

* Contains well gas, derivated gas as well as other sources of energy which may be recovered.

** Column (2) to be filled in only for the copies to be sent to the competent authority and to the electric power market operator.

ANNEX 5
To the Rules

Example of calculation

Supposing a supplier f_1 purchases during the period of referenceper total contracts and from the Day Ahead Market the following quantities:

	Electric power purchased Total	Electric power from coal	Electric power from nuclear comb.	Electric power from natural gas	Electric power from mazout	Electric power from other conventional sources	Hydro electric power
		1	2	3	4	5	6
	GWh	GWh	GWh	GWh	GWh	GWh	GWh
From producer p_1	3000	2000	0	1000	0	0	0
From producer p_2	1000	0	0	0	0	0	1000
De pe PZU	40	10	5	10	5	0	10

Then the contributions of the primary sources to the suppler's structure of acquisition are:

$$x_1 = \frac{2000 + 0 + 10}{3000 + 1000 + 40} \cdot 100 = 49{,}8\%$$

$$x_2 = \frac{0 + 0 + 5}{3000 + 1000 + 40} \cdot 100 = 0{,}1\%$$

$$x_3 = \frac{1000 + 0 + 10}{3000 + 1000 + 40} \cdot 100 = 25\%$$

$$x_4 = \frac{0 + 0 + 5}{3000 + 1000 + 40} \cdot 100 = 0{,}1\%$$

$$x_6 = \frac{0 + 1000 + 10}{3000 + 1000 + 40} \cdot 100 = 25\%$$

$$x^5 = 0,\ x^7 = 0,\ x^8 = 0,\ x^9 = 0,\ x^{10} = 0$$

where: 1 = coal ; 2 = nuclear; 3 = natual gas; 4 = mazout; 5= other conventional sources, 6 = hydro; 7= wind; 8 = biomass; 9 = sun; 10 = other renewables

Considering the orientative values e_j from table 1, values strictly used for the purpose of this example of calculations:

Table 1.

	Coal	Nuclear	Natural gas	Mazout	Other conventional	Hydro	Wind	Bio-mass	Sun	Other SRE
	1	2	3	4	5	6	7	8	9	10
Specific emissions of CO_2 [g/kWh]	1100	0	120	3370	1500	0	0	0	0	0

Then:

The total emissions of CO_2 resulting out of the generation of a quantity of 4040 GWh electric power, are:

$$e = 0{,}498 \cdot 1100 + 0{,}001 \cdot 0 + 0{,}25 \cdot 120 + 0{,}001 \cdot 3370 + 0 \cdot 1500 + 0{,}25 \cdot 0 + 0 \cdot 0 + 0 \cdot 0 + 0 \cdot 0 + 0 \cdot 0 = 581$$

e = 581 g/kWh and if the average at country level = 100 (910 g/kWh), they represent 63 and, consequently, the impact on the environment, from point of view of CO_2 emissions, will be under the country average value and it is a small impact.