



ZYRA E RREGULLATORIT PËR ENERGJI  
ENERGY REGULATORY OFFICE  
REGULATORNI URED ZA ENERGIJU

# Evaluation Report

The Eighth Electricity Tariff Review

ETR8 (2014-2015)

Calculation of Maximum Allowed Revenues and Charges of Regulated  
Generator

16 May 2014



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## 1 Introduction

The Energy Regulatory Office is currently in the process of conducting the Eighth Electricity Tariff Review. In this process is conducted the Regular Annual Updates for the Public Electricity Supplier (PES) and the Regular Adjustment for the Regulated Generator (KEK), Transmission, System and Market Operator (KOSTT) and the Distribution System Operator (KEDS).

This Report presents ERO's views on the Maximum Allowed Revenues (MAR) of Generator. Alongside with this Report, ERO will publish evaluation on KOST, Transmission, System and Market Operator (KOSTT), the Distribution System Operator (KEDS) the Public Electricity Supplier (PES) MARs.

## 2. Regular Adjustments

In 2013 ERO conducted the Periodic Review Process (ETR7) during which it set the Maximum Allowed Revenues for the next four Relevant Years for the Regulated Generator (KEK), and for the next five Relevant Years for the Transmission System and Market Operator (KOSTT) and the Distribution System Operator (DSO). The Maximum Allowed Revenues of the Public Electricity Supplier (PES) were set for one year during the Input Values Review process as per the Rule on Public Electricity Supplier Pricing.

According to The Pricing Rules of Regulated Generator, following the end of each Relevant Year of the 5 years Regulatory Period, the Energy Regulatory Office (ERO) shall undergo the Regular Adjustment process for the Regulated Generator. The Regular Adjustment Process differs from a full-blown Periodic Review because they do not include a detailed review of the Allowed Operating and Capital Costs for the Regulated Generator. During these adjustments, ERO conducts only mechanical calculations to reflect annual inflation rate of costs, indexing allowed Operating costs for the efficiency factor and updating other costs to reflect for difference between allowed and actual values.

During this Regular Adjustment ERO will:

1. Index Operating and Maintenance Costs for the Regulated Generator to reflect for Efficiency Factor set during the Periodic Reviews and Annual Inflation rate determined using the Harmonised Indices of Consumer Prices (HICPs) for all Units in Eurozone;
2. Update on Allowed Lignite Supply Costs (LGSCt) of Regulated Generator;
3. Update on Allowed Other Fuel Supply Costs (OTFCt) of Regulated Generator;
4. Update on Other Pass-Through Costs (PSTCt);
5. Set Regulated Generator's Availability Target;
6. Set Energy and Capacity Charge for Regulated Generator.

This report has been structured as follows:

- Section 3 presents ERO's view on application filed by Regulated Generator;
- Section 4 presents a summary of ERO's views on application filed by Regulated Generator.



### 3. ERO's view on Regulated Generator's MAR

During the Regular Adjustments, ERO determines the allowed difference of the Maximum Allowed revenues (MAR) for Regulated generator. This difference will be calculated according to formula provided in paragraph 2 of the Schedule 1 of Pricing Rule of Regulated Generator

$$MAR_t = OPM_{Ct} + DEP_{Ct} + RTN_{Ct} + LGSC_t + OTFC_t + PST_{Ct}$$

Where

*MAR<sub>t</sub> is Maximum Allowed Revenues in Relevant Year t*

*OPM<sub>Ct</sub> is allowed operating and maintenance costs in Relevant Year t*

*DEP<sub>Ct</sub> is allowed depreciation in Relevant Year t*

*RTN<sub>Ct</sub> is allowed return on capital in Relevant Year t*

*LGSC<sub>t</sub> is allowed lignite supply costs in Relevant Year t*

*OTFC<sub>t</sub> is allowed other fuel supply costs in Relevant Year t*

*PST<sub>Ct</sub> is Pass-Through Costs in Relevant Year t*

#### 3.1 ERO's view on Allowed operating and maintenance costs (OPM<sub>Ct</sub>)

Allowed operating and maintenance costs (OPM<sub>Ct</sub>) of the Regulated Generator are reset during each Annual Adjustments using the following formula (Pricing Rule of Regulated Generator, Schedule 1, paragraph 2.1):

$$OPM_{Ct} = OPM_{Ct-1} * (1 + CPI_{t-1}) * (1 - Et) * (1 - Pt)$$

Where

*OPM<sub>Ct</sub> is allowed operating and maintenance costs in Relevant Year t*

*OPM<sub>Ct-1</sub> is allowed operating and maintenance costs in Relevant Year t-1, except for Relevant Year 1 when a value determined by the Regulator at the most recent Periodic Review shall be used*

*CPI<sub>t-1</sub> is the actual value of inflation in Relevant Year t-1, measured using the "Harmonized Indices of Consumer Prices (HICPs) – All Items, for the Eurozone" published by Eurostat, or any other measure of inflation that the Regulator determines is a better measure of the change in operating and maintenance costs over time and is allowed at a Periodic Review*

*Et is the Efficiency Factor in Relevant Year t, which is set at Periodic Reviews*



### 3.1.1 *Applicable inflation rate*

KEK proposed that applicable inflation rate is 0.7%, which at the time they have filed their application presented the inflation rate of October 2013, estimated according to the Harmonized Indices of Consumer Prices (HICPs) for all Units in Eurozone.

ERO reviewed the applicable inflation rate for MAR indexing of Regulated Generator according to the latest data on annual Inflation provided in EUROSTAT website. Applicable inflation rate for February 2014 results to be 0.7%<sup>1</sup>.

### 3.1.2 *Applicable efficiency factor*

KEK proposed reduction of applicable operating efficiency factor from 4% - as set by ERO- to 1%. KEK reasoned its proposal by the fact that a considerable part of qualified staff in KEK now became part of KEDS and it is very difficult to replace qualified staff with lowest KEK wages comparing to other actors in the sector. Their proposal is also based on the argument that KEK is charged with vulnerable social cases of employees charged to it regardless of that ERO assumes its commercial operating nature.

ERO stated that Efficiency Factor is set during the Periodic Review to whole Regulatory Period in order to enable operators to implement their long term planning to improve their operating efficiency, therefore, by not meeting this target during the First Relevant Year does not necessarily mean that target is not achievable during the Regulatory Period. Consequently ERO will continue to apply the efficiency factor of 4% for indexing purposes of operating and maintenance costs.

### 3.1.3 *Application of E-factor in OTFct*

In their proposal for Maximum Allowed Revenues for the second Relevant Year, KEK estimated that in applying the efficiency factor for the First Relevant Year, ERO, in calculations of OPMct, included also Other Fuel Allowed Costs (OTFct) which, according to formula provided under paragraph 2, schedule 1 of the Rule, should have not been included. Applying the efficiency factor of 4% to Other Fuel Allowed Costs of €8.3 million resulted to unde-estimation of KEK MAR for €0.3 million.

ERO accepted KEK proposal and made adjustments to Maximum Allowed Revenues for the Second Relevant Year in order to reflect aforementioned update.

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<sup>1</sup> <http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do;jsessionid=9ea7d07d30e7a2a0d00a3622451d993b94fd5b2e0b51.e340aN8PchaTby0Lc3aNchuMchmMe0?tab=table&pcode=teicp000&language=en>



Formula for calculation of Operating and Maintenance Costs provided under paragraph 2.1 of Schedule 1 of the Rule, assumes that allowance for OPMcT is profiled during the Regulatory period so OPMcT of a certain relevant year is calculated by indexing the value of OPMcT of previous relevant year. Since ERO did not profiled OPMcT during the Periodic Review (based on consultation with all stakeholders during the tariff review ETR7), direct application of aforementioned formula would result to value which does not comply with annual allowances for OPMcT during all Relevant Years of Regulatory Period. In order to update this, ERO applied the following formula:

$$\text{OPMC} = \text{OPMC}_{t-1} * (\text{CPI}_{t-1}) * (1 - E_t) + \text{OPMC}_t$$

Allowed Operating and Maintenance Costs for Regulated Generator for the Second Relevant Year resulted to be €20.9 million.

### 3.2 ERO view on Allowed Depreciation (DEPCt)

Allowed Depreciation for Regulated Generator is reset during each Regular Adjustment according to paragraph 2.2 of Schedule 1 of the Rule:

$$\text{DEPCt} = \text{DEPC}_{t-1} * (1 + \text{CPI}_{t-1}) * (1 - P_t)$$

Where

DEPCt is other allowed depreciation in Relevant Year t, which is smoothed such that it is constant over the Regulatory Period

DEPC<sub>t-1</sub> is allowed depreciation in Relevant Year t-1, except for Relevant Year 1 when a value determined by the Regulator at the most recent Periodic Review shall be used, which is smoothed such that it is constant over the Regulatory Period

CPI<sub>t-1</sub> is the actual value of inflation in Relevant Year t-1, measured using the “Harmonised Indices of Consumer Prices (HICPs) – All Items, for the Eurozone” published by Eurostat

P<sub>t</sub> is the Profiling Factor in Relevant Year t, which is set at Periodic Reviews

Same as in case of Operating and Maintenance Costs, formula for calculation of DEPCt provided in paragraph 2.2 of Schedule 1 of the Rule, assumes that allowed value of DEPCt is profiled over the Regulatory period so DEPCt of a certain relevant year is calculated by indexing the value of DEPCt of previous relevant year. Since ERO did not profiled DEPCt during the Periodic Review direct application of aforementioned formula would result to value which does not comply with annual allowances for DEPCt during all Relevant Years of Regulatory Period. In order to update this, ERO applied the following formula:

$$\text{DEPCt} = \text{DEPC}_{t-1} * (1 + \text{CPI}_{t-1}) * (1 - P_t)$$



Allowed depreciation for the second relevant year results to be €22.3 million.

### 3.3 ERO's view on Allowed Return (RTNC<sub>t</sub>)

The Allowed Return component is calculated with the following formula (Schedule 1 paragraph 2.3 of the Rule):

$$RTNC_t = RTNC_{t-1} * (1 + CPI_{t-1}) * (1 - P_t)$$

Where

<i>RTNC<sub>t</sub></i>	<i>is allowed return on capital in Relevant Year t, which is smoothed such that it is constant over the Regulatory Period</i>
<i>RTNC<sub>t-1</sub></i>	<i>is allowed return on capital in Relevant Year t-1, except for Relevant Year 1 when a value determined by the Regulator at the most recent Periodic Review shall be used, which is smoothed such that it is constant over the Regulatory Period</i>
<i>CPI<sub>t-1</sub></i>	<i>is the actual value of inflation in Relevant Year t-1, measured using the "Harmonised Indices of Consumer Prices (HICPs) – All Items, for the Eurozone" published by Eurostat</i>
<i>P<sub>t</sub></i>	<i>is the Profiling Factor in Relevant Year t, which is set at Periodic Reviews</i>

As in case of Operating and Maintenance Costs and of DEPC<sub>t</sub> formula for calculating Allowed Return provided in paragraph 2.2 of Schedule 1 of the Rule, assumes that allowed value of RTNC<sub>t</sub> is profiled over the Regulatory period so RTNC<sub>t</sub> of a certain relevant year is calculated by indexing the value of RTNC<sub>t</sub> of previous relevant year. Since ERO did not profiled RTNC<sub>t</sub> during the Periodic Review direct application of aforementioned formula would result to value which does not comply with annual allowances for RTNC<sub>t</sub> during all Relevant Years of Regulatory Period. In order to update this, ERO applied the following formula:

$$RTNC = RTNC_{t-1} * (CPI_{t-1}) + (RTNC_t)$$

*The allowed return of the Regulated Generator has been set at €8.8 million*

### 3.4 ERO's view on Allowed Lignite Supply Costs (LGSC<sub>t</sub>)

In absence of Lignite Supply Agreement, allowed lignite supply costs by Regulated Generator are calculated based on the same principles as those for Generator which is in compliance with section 11 of the Regulated Generator Pricing Rule.

ERO's view on allowed Operating and Maintenance Costs for Mining Division for the Second Relevant Year is €37.3 million. Allowed depreciation and return have been assessed to be €14.2 million, respectively €9.3 million.

Lignite purchase costs are also updated to reflect differences between allowed and actual costs. Summary of these updates is provided as follows:



- Allowed costs on lignite royalty are updated to reflect difference between allowed value during the previous relevant year of €25.6 million and actual costs of €24.4 million. Difference of €1.2 million has been update with interest. Final allowed value on royalty for the next relevant year is €24.5 million.
- In setting MAR for the five years of periodic review, the Regulated Generator did not declare lignite sales from coal Mine in value of €2.1 million. This value has been updated with ineterst. Allowed value of coal sales for the second Relevant year is €1.8 million.
- Overhead allocations, according to agreement between KEDS and KEK of which is allocated to Mining Division is €1.6 million.

Overall value of aformentioned updates after applying interest rate is €6.1 million.

Allowed costs of purchase of lignite for Regulated Generator is €79.3 million.

### 3.5 ERO's view on Allowed Other Fuel Costs (OTFct)

During each Regular adjustment, ERO updates differences between allowed costs and actual costs from purchase of other fuel (OTFct). Total costs of allowed other fuel costs allowed for the first relevant year was €8.2 million while actual costs were €6.5 million. Difference of €1.7 million will be substracted from Generation MAR for the second relevant year with interest. Total allowed other fuel costs for the second relevant year, following updates, is €6.28 million.

### 3.6 ERO's view on Pass – Through Costs (PSTct)

ERO considers that Pass-Through costs for Regulated Generator for payment to Market Operator and System Operator are €2.9 million.

### 3.7 Other updates on Regulated Generator

The Regulated Generator MAR for the next relevant year is updated to reflect the following matters:

- Overheads Allocations, according to agreement between KEDS and KEK. Allocated value to KEK Generation is €0.8 million.
- Value of Operating and Maintenance costs has been increased to reflect health insurance costs for KEK employees. It has been reflected as KEK MAR increase in amount of €1.4 million.
- MAR has been reduced for €0.2 million to reflect KEK Generation revenues from sale of steam.
- MAR has been reduced for €0.1 million to reflect KEK Generation revenues from sale of ash.
- MAR has been reduced for €0.4 million to reflect other KEK Generation revenues.
- MAR has been increased for €0.8 million to reflect energy consumed by Coal Production Division (CPD) for 2013.

KEK is asking application of Revenues Adjustment Factor (KREV) for differences between Maximum Allowed revenues and actual for 2012. Alongside application it did not submit additional evidences over this claim.



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ERO did not conduct Maximum Allowed Revenues Adjustments since KREV has been evaluated during the ETR7 and in absence of relevant sufficient evidences has been dismissed the claim to charge customers and KEK, against ERO Decision, initiated a judicial review. On a matter on which a decision has been rendered can be decided again unless competent court decided otherwise through a merit based Judgment.

**4 ERO's view on Regulated Generator MAR**

ERO's view on Maximum Allowed Revenues on Regulated Generator for the second relevant year is €139.5 million.

Table below summarises comparison of Maximum Allowed Revenues and claimed for KEK ShA with main components of operating & maintenance costs, depreciation and allowed return following regular adjustments of annual costs.



MAR costs categories			MAR 2013	MAR 2014
Operating & Maintenance Costs(O&M)	Euro	OPMct	22,740,755	20,897,514
Calculated depreciation	Euro	DEPCt	21,047,568	22,300,881
Return on capital	Euro	RETnt	7,996,863	8,767,760
Allowed lignite costs r	Euro	LGSCt	87,785,887	76,845,845
Allowed Other Fuel Costs	Euro	OTFCt	8,261,669	6,283,322
Forecasted Pass through costs	<b>Euro</b>	<b>PSTCft</b>	<b>2,858,134</b>	<b>3,962,898</b>
Ash revenues	Euro			-129,424
Adjustments to allowed other fuel costs a	Euro			330,467
Allocation of Overheads as per KEK & KEDS agreement	Euro			-797,007
Steam revenues 2013	Euro			-172,968
Health insurance 2013	Euro			537,814
Other	Euro			-434,669
Health Insurance 2014	Euro			935,250
Adjustments for consumption by Coal Production Division (CPD).				808,942
<b>Maximum Allowed revenues PP "A&amp;B"</b>	<b>Euro</b>	<b>MAR</b>	<b>150,690,876</b>	<b>139,535,183</b>

## 2 Structure of charges for energy and capacity of KEK Generation

Based on the Generation Pricing Rule and Methodology for Setting Regulated Generator Charges, ERO allocated Maximum Allowed Revenues for KEK Sh.A Fixed Costs that are covered through capacity charges and Variable Costs that are covered through energy charges.

The structure of energy and capacity charges to be implemented for relevant tariff year is provided in the table below.

Structure of charges	Unit	Charge
Capacity Charges	€/MW/h	18.63
Energy Charges	€/MWh	7.99