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Tariff Application - KOSTT

May 2007

Prishtina



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1 Introduction

This is an application to the Energy Regulatory Office (ERO) for the approval of the Transmission Use of System (TUOS) Charge of the transmission and market operator of Kosovo KOSTT. The TUOS Charge consists of the network usage charge, the system operation charge and the market operation charge. The submission adheres closely to the tariff application guidelines issued by ERO.

KOSTT issues this application for the year 2007 (1 May 2007 – 31 December 2007) for

- the charge for transmission infrastructure
- the system operation charge and
- for the Market Operator charge

and submits the application in the form of a hard copy and electronically to ERO. All proposed tariffs shall be applicable from 1 May 2007.

According to the Tariff Application guidelines this application consists of five sections and two reporting tables:

1. Tariff Strategy
2. Allowed Revenues
3. Existing Tariff updates
4. Proposed Amendments
5. Consultation

Reporting Table 1: Existing Tariff (not applicable see point 5 below)

Reporting Table 2: Amended Tariff

2 Tariff Strategy

This section evaluates the existing tariffs in terms of conformity with the Law on the Energy Regulator and the Tariff Methodology, in particular the requirements on cost-reflectiveness and non-discriminatory as required in that methodology. In addition it is required to analyse the determination of the existing charges especially the relation between the relative charges of the different customer categories and the cost of supplying these customers.

In calculating its tariffs, KOSTT follows the rules of the Tariff Methodology and the Law on the Energy Regulator. The calculated tariffs are cost-reflective and non-discriminatory as required in the methodology. These principles are expressed in the different tariffs for the 400/220 kV and 110 kV network that ensures that customers connected to the extra-high voltage grid only pay a share of its network cost and not for the 110 kV network. The charges are calculated as follows:

- In accordance with the tariff methodology the **network charge** is calculated on a demand basis taking into account the five highest peaks of the year as defined in the tariff methodology and specified in the market rules. Only domestic customers are charged.
- **System operations charges** are pure energy charges paid by generators and domestic customers. We calculate this charge based on the total amount of energy (without imports and exports) that is transported over the grid. As agreed with ERO we add the cost for ancillary services to the revenue requirements for system operation since at the time of tariff application there is no market for ancillary services. We intend to change this procedure as soon as market rules and a market for ancillary services is established.
- **Market operator charge** is calculated as an energy tariff using average cost allocation by dividing the total cost allocated to the market operator costs centre by the sum of energy sent out by generators in Kosovo connected to the transmission network plus energy metered off the transmission network by load located in Kosovo (i.e. excludes exports and imports). It is approved annually by the regulator.



The following table summarizes the structure of KOSTT charges:

Table 1 - KOSTT Tariff Structure

TUOS Elements	Calculation method
Network Usage Charge (transmission infrastructure)	Calculated from smoothed revenue G/L-split: $G = 0$, i.e. charge paid only by users of electricity Demand charge based on average coincident peak based on 5 peaks (suggestion: option for demand and energy charge) Voltage level differentiation with 400/220 kV and 110 kV.
System Operation (including system services)	Calculated from smoothed revenue Amount allowed each year for the purchase of ancillary services (interim solution) Energy tariff element is paid by all network users Tariff element set equal to allowed SO revenues plus cost ancillary services divided by units metered at entry or exit to the transmission network. (excluding imports and exports)
Market Operator	Allowed revenues approved on an annual basis Paid by all network users Tariff set equal to allowed revenues divided by units metered at entry or exit to the transmission network. (excluding imports and exports)



3 Allowed Revenues

This section provides the calculation of the maximum allowed revenues that are recovered by KOSTT with the allowed charges.

It has to be taken into account that this tariff application is for the year 2007 and that the maximum allowed revenue for that year is calculated according to the revenue cap including smoothing mechanism that applies over a three year period (2007-2009) as determined in the tariff methodology and as approved by ERO. This leads to a difference between the maximum allowed revenue (smoothed) and the unsmoothed revenue requirements of KOSTT. So, within a three-year time period the recovery of costs is guaranteed and during the regulatory period a certain under-/over coverage of the (unsmoothed) allowed revenues is given.

The allowed costs for the purchase of ancillary services, energy to cover losses and the market operator are approved on an annual basis.

The following table shows the revenues before and after smoothing; the tariff calculation is based on the smoothed revenues as approved by ERO.



Table 2 - Allowed Revenue for KOSTT – Before and After Smoothing (2006 prices)

Allowed Revenue for KOSTT		2007	2008	2009
Purchase of ancillary services	000 euro	1,175	1,483	1,591
Losses (includes transit losses)	000 euro	4,555	4,580	4,518
Other opex	000 euro	7,170	9,370	11,507
Depreciation	000 euro	568	773	1,497
Return on Assets	000 euro	220	771	2,104
Any cost of pre-2006 debt	000 euro	0	0	0
Any other items	000 euro	0	0	0
Non-regulated revenue	000 euro	0	0	0
Total revenue requirements before smoothing	000 euro	13,688	16,977	21,217
- Market Operator Costs	000 euro	115	125	145
- Ancillary Services	000 euro	1,175	1,483	1,591
- Losses	000 euro	4,555	4,580	4,518
Transmission Network costs before smoothing	000 euro	7,843	10,789	14,963
Transmission Network costs after smoothing	000 euro	7,353	10,524	15,062
X Factor	000 euro	0.000	-0.431	-0.431
Deficit (-) / surplus (+)	000 euro	-490	-265	99
Total Revenue requirements after smoothing	000 euro	13,198	16,712	21,316
(includes MO revenue)				

The amounts shown in Table 2 above are consistent with the amounts and parameters, that we understand will be provided by the ERO, that specify the allowed revenues for KOSTT for 2007, following Equations 4-1 and 4-5 of the Tariff Methodology.

Table 3 - Variables Underlying Tariff Methodology Equations (2007 prices)

Calculation of Losses for Transmission Network		2007
Losses relating to Kosovo demand & supply		
Losses from energy balance	GWh	139
Cost of energy used in calculating losses	Euro/MWh	26.80
Cost of losses -	000 Euro	3,724
Losses relating to transit flows		
Transit energy	GWh	3,100
Target loss rate	%	1.0%
Losses	GWh	31
Cost of losses -	000 Euro	831
Total cost of losses	000 Euro	4,555
TSO Allowed Revenues	000 Euro	7,353.0
Maximum allowed revenue TMART-1	000 Euro	
X Factor		-43.12
Allowed cost of Ancillary Services AS	000 Euro	1,175
Allowed cost of Market Operator Services,MO	000 Euro	115

The tariffs in this application are calculated as shown in

Table 5 using the figures in Table 2 above and the allocation factors in Table 4.

Table 4 – Allocation Factors

Allocation factors (for allocating smoothed revenue between SO and Infrastructure)		2007	2008	2009
% of smoothed revenue going to 110 kV infrastructure charge	%	42.89%	42.49%	42.11%
% of smoothed revenue going to 400/220 kV charge	%	37.41%	41.68%	44.79%
% of smoothed revenue going to SO charge	%	19.70%	15.83%	13.10%
Total	%	100.0%	100.0%	100.0%

Table 5 – Calculation of Tariffs

Revenue Requirements After Smoothing		2007	2008	2009
Smoothed TSO revenue (excludes AS, losses & MO)	000 euro	3,527	7,353	10,524
Infrastructure Charges				
Allowed revenue allocated to 20/400 kV infrastructure	000 euro	2,692	4,298	6,611
Allowed revenue allocated to 110 kV infrastructure	000 euro	3,212	4,560	6,478
Total chargeable demand for 220/400 kV charge	MW	37.0	110.0	110.0
Total chargeable demand for 110 kV charge	MW	852.0	832.0	936.0
Infrastructure charge		3.11886	4.69882	6.50847
- 220/400 kV	Euro/kW/yr	3.029	4.5629	6.320
- 110 kV	Euro/kW/yr	6.799	10.043	13.241
SO charge				
Allowed revenue allocated to SO	000 euro	1,449	1,666	1,973
Ancillary Services	000 euro	1,175	1,483	1,591
Losses (includes transit losses)	000 euro	4,555	4,580	4,518
Total SO charge revenue	000 euro	7,179	7,729	8,082
Chargeable demand for SO (& MO) charge	GWh	8,455	9,343	9,946
SO charge	Euro/MWh	0.849	0.827	0.813
MO charge				
MO revenue	000 euro	115	125	145
MO charge	Euro/MWh	0.014	0.013	0.015
Total revenue requirements for KOSTT	000 euro	3,527	13,198	16,712



The above figures are in 2006 prices – the table below shows them in 2007 prices and rounded to four decimal places. It also reconciles the expected revenue from these tariffs with that the allowed revenue, also in 2007 prices.



Table 6 – TUOS charges & Reconciliation with Allowed Revenue (2007 prices)

Infrastructure Charges		
Allowed revenue allocated to 20/400 kV infrastructure	000 euro	2,692
Allowed revenue allocated to 110 kV infrastructure	000 euro	3,212
Total chargeable demand for 220/400 kV charge	MW	37.0
Total chargeable demand for 110 kV charge	MW	852.0
Infrastructure charge		3.11886
- 220/400 kV	Euro/kW/yr	3.029
- 110 kV	Euro/kW/yr	6.799
SO charge		
Allowed revenue allocated to SO	000 euro	1,449
Ancillary Services	000 euro	1,175
Losses (includes transit losses)	000 euro	4,555
Total SO charge revenue	000 euro	7,179
Chargeable demand for SO (& MO) charge	GWh	8455
SO charge	Euro/MWh	0.849
MO charge		
MO revenue	000 euro	115
MO charge	Euro/MWh	0.014
Total revenue requirements for KOSTT	000 euro	3,527 13,198

4 Existing Tariff updates

According to the tariff application guidelines this section is intended to provide an explanation on how the existing regulated tariffs are updated to conform to the maximum allowed revenues of the coming year as calculated in the revenue requirements.

Currently there are no TUOS tariffs. The interim tariffs are calculated as monthly payments from KEK to KOSTT. Therefore no explanation on the tariff updated can be provided

5 Proposed amendments

According to the tariff application guidelines, this section is intended to provide a description of the amended regulated tariffs structure and a comparison between the existing and the proposed structure. Since this is the first time that TUOS charges are calculated no analysis to this point can be provided. For an explanation of the proposed tariff structure see point 2.

6 Consultation

The preparation of the tariff application was accompanied by a deep analysis of the cost structure and assets of KOSTT. For this we were supported by consultants. All results were discussed in meetings with ERO and the consultants. Please find below a timetable summarising our activities:

Discussion and analysis of KOSTT asset and capital expenditure plan	May-September 2006 (Public hearing on revenue requirements 12. September 2006)
Development of tariff structure and model	June-September 2006 (Training on the model week starting 21 August)
Decision on revenue requirements by ERO	2 and 4 May 2007
Calculation of proposed tariffs	April – May 2007