

## Energy Supply & Market Structure Department

June, 2006

# Report on KEK Electricity Import Prices vs. European Electricity Prices for the first half of 2006

Power Balance for 2006 foresees that in order to meet forecasted monthly demand, KEK has to import a certain amount of energy. This situation referring to Power Balance remains without change during almost whole of 2006, except on the July and August when there are surpluses, which are considered as export.

The forecasts and assumptions contained in this report relate only to firm contracted imports, used to supplement Kosovo's available generating capacity in meeting demand, including imports achieved to supplement trips of generation capacities in operation. KEK's current policy is to contract imports through annual tendering rounds for a number of lots, with each lot being for periods of one month or more. In practice, KEK is unable to conclude contracts for all lots due to uncertainties over available cash and, as a consequence, is forced into load shedding or purchases of short-term imports which are at a significantly higher cost than those available through the tendering process. Since the approval of these contracts and any other PPAs referring to the Law is a responsibility of the Regulator, KEK will be required to provide ERO with the justification of the needs for purchasing the requested amount, together with explanation of technical specification of the type of energy required, before announcing the tender.

The draft market rules envisage that annual and monthly rights to use inter-connector capacity will be allocated through auctions. We have assumed that available inter-connector capacity will exceed import requirements, leading to prices paid at the inter-connector capacity auctions tending to zero. Consequently, no charge for inter-connector access is included in the proposed import prices. We have also assumed that Kosovo will be able to import over other interconnectors than those with Serbia to which it is currently restricted, thus increasing its range of import options.

Further in this report are analysed import prices achieved by KEK and prices of day-ahead trade, as well as bilateral trade in some European markets with the focus in region. In principle, market testing in the form of competitive tendering should provide the best guide as to expectations of future import prices for Kosovo. However, there are a number of reasons why this might not be the case:

- KEK is an unattractive counter-party, being reliant on KCB funding to pay for imports. Bidders can be expected to have priced this into their offers by allowing for increased credit risk and adding a markup to recover the bidding costs for contracts that are not concluded due to financial constraints in KEK.
- This year KEK entered the market relatively late, calling for bids in February 2006 for immediate delivery. It may be that more attractive bids could have been obtained if the tendering round had been launched at an earlier date. We think that in future the best time for launching the tender is between 15<sup>th</sup> March and 15<sup>th</sup> April for longer period (one or more years), since:
  - until this period the issue of available fund for import will be clarified
  - power balance for subsequent year will be finalized and approved
  - there is more time for preparation of the tender, and
  - in this period electricity prices in the region show the decreasing dynamic
- Kosovo is not currently formally recognised as a TSO within the SEE regional market. This leaves it in a position where mechanisms for allocation of interconnector capacity are unclear and, in practice, control is exerted by EPS-EMS of Serbia which, thereby, also exerts control over Kosovo's import options.

KEK called for bids to supply 14 different import lots in February 2006. Of these, two lots were for emergency supplies. The resulting winning bids received for the other lots are summarised below.

*Table 1: Results of the tender launched by KEK*

No	Period (2006)	Days in period	Type	Simple	Volume-weighted	Volume
				Average price (€/MWh)*		MWh
1	Feb	28	Band (24-hour)	48.47	48.56	33 600
2	Feb	28	Modulated (0700-2300)	58.11	58.04	53 760
3	Mar	31	Modulated (0700-2300)	54.86	54.86	39 680
4	Apr	11	Modulated (0700-2300)	52.9	51.8	35 200
5	May	31	Modulated (0700-2300)	47.27	47.12	79 360
6	Jun	26	Modulated (0700-2300)	52.24	52.33	54 080
7	Sep	30	Modulated (0700-2300)	57.18	56.96	69 600
8	Oct	11	Band (24-hour)	47.83	48.03	23 760
9	Oct	11	Modulated (0700-2300)	57.25	57.36	23 760
10	Nov	30	Modulated (0700-2300)	60.68	60.57	28 800
11	Dec	31	Band (24-hour)	51.03	50.42	37 200
12	Dec	31	Modulated (0700-2300)	62.32	62.39	64 480
<i>Averages across lots</i>						<i>Total</i>
<b>Band</b>				<b>49.11</b>	<b>49.19</b>	<b>94 560</b>
<b>Modulated</b>				<b>55.87</b>	<b>55.4</b>	<b>448 720</b>
<b>All lots</b>				<b>54.18</b>	<b>54.33</b>	<b>543 280</b>

\* In some cases, a separate transmission congestion charges has been added to the bid price in calculating averages

For the purpose of comparison in the table below we have provided a summary of prices observed on published tenders in some regional countries (*Source: SEETEC report - Study of the Obstacles to Trade and Compatibility of the Market Rules*). Although this comparison doesn't reflect real state since the duration, dates, volume and terms of the contracts are different for each country, the weighted average price received by KEK seems to be very high.

Table 2: SEE prices

Country	Exchange	Date	Price
			€/MWh
Albania	Recent tender	2006	EFT: 42 (50MW band energy)
			Ezpada: 48.40 (40MW)
			EGL: 43.47 (17 MW)
Bosnia and Herzegovina	EPHZHB sales price	2006	31.44 (average)
Bulgaria*	NEK Bulk Supply Tariff	2005	≈ 28.5
Czech Republic	OTE (day-ahead market)	Feb-06	25-63 (average, business days)
			30-49 (average, whole week)
Hungary	Virtual capacity auction	2006	47.35 (peak)
			24.23 (off-peak)
Montenegro	Recent tender by KAP	2006	20.44 (regulated)
			40 (open market)
<b>Kosovo</b>	<b>Tender by KEK</b>	<b>2006</b>	<b>49.19 (band)</b>
			<b>55.40 (modulated)</b>

\* This is the price at which NEK is selling to discos (it is an average of NEK purchased price including transmission)

Currently only a few traders handle about 90% of current cross border trade in SEE. It is not clear why generators with surplus power in the region (such as EPRS, NEK, Hidroelectrica) are trading through traders instead of developing an internal trading business. The most important cross border traders in SEE are: EFT, Energy Holding, EGL, ATEL Montmontaza, and PCC. FYR of Macedonia (MEPSO-Wholesale supplier) just launched a tender for the import of 2,696 GWh of electricity in 2006-2007. Recently EPRS from Bosnia and Herzegovina launched a tender for export of 1,280GWh, which were sold in 5 lots to different traders. In addition to integrated utilities and wholesale suppliers, some large industrial consumers are also importing directly from traders. Total regional production was at 168 TWh (non EU Countries) in 2004, cross border trading (commercial contracts) has been estimated by EFET at 45.8 TWh (out of 264 TWh including some EU Countries), representing 17% of production.

Further more we have provided weighted average prices of some European and regional day-ahead markets, where is also presented KEK realized import prices until May.

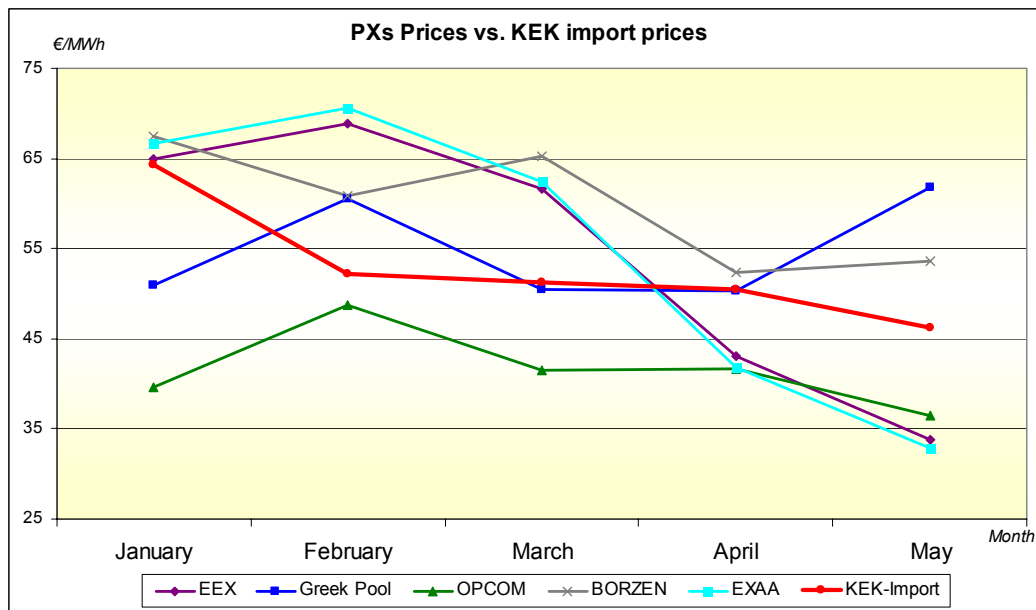
Table 3: Day-ahead prices vs. KEK import prices

2006	EEX		Greek Pool		OPCOM		BORZEN		EXAA		KEK-Import	
	€/MWh	MWh	€/MWh	MWh	€/MWh	MWh	€/MWh	MWh	€/MWh	MWh	€/MWh	MWh
January	64.92	7 352 703	50.93	4 809 652	39.68	289 777	67.42	48	66.67	87 249	64.26	5 730
February	68.89	6 984 544	60.57	4 250 853	48.69	288 951	60.89	-	70.61	106 401	52.19	63 352
March	61.67	7 095 907	50.49	4 323 724	41.55	329 203	65.22	264	62.43	108 935		
April	43.10	7 093 382	50.35	3 787 712	41.68	396 499	52.30	120	41.83	120 861	50.43	27 280
May	33.88	7 054 058	61.81	4 238 855	36.54	324 870	53.64	-	32.90	123 290	46.22	64 480

From this point of view KEK import prices for 2006 seem to be similar to prices in some European Power Exchange shown in table & diagram, even though we can not rely on this comparison, given that prices in the day-ahead market are a spot prices reflecting real supply and demand for particular hour and include higher risk. Since the bulk part of KEK import is from Romania through traders (EFT and EGL), we have compare KEK import prices with OPCOM day-ahead prices and it seems that prices offered to KEK by traders are much higher compared to those in day-ahead market.

This is illustrated in the diagram below.

Diagram 1: Day-ahead prices vs. KEK import prices



Note: KEK import price for March is average of February and April, since there was no import

In the period January until May 2006 KEK has imported 160 842 MWh, with the weighted average price of € 49.93/MWh. From the beginning of 2006 up to May, KEK has spent for import € 8 030 990, which is 5.8 % more compared to the same period last year, while imported 5.1 % less energy than the same period last year, implying an increase in price in this period of 11 %.

We have also observed the situation of KEK imports from 2000 until 2006.

Table 3: KEK import (contractual, emergency & exchange energy) volume & price (2000 - May 2006)

KEK Contractual Import	Volume	Weighted Average Price	Amount
	MWh	(\$)/€/MWh	(\$)/€
2000*	778 870	30.43	23 701 412
2001*	871 485	31.30	27 276 960
2002*	627 265	32.67	20 491 605
2003	314 794	36.58	11 516 420
2004	338 253	37.87	12 810 983
2005	189 300	46.97	8 891 561
2006* (I-V)	160 842	49.93	8 030 990

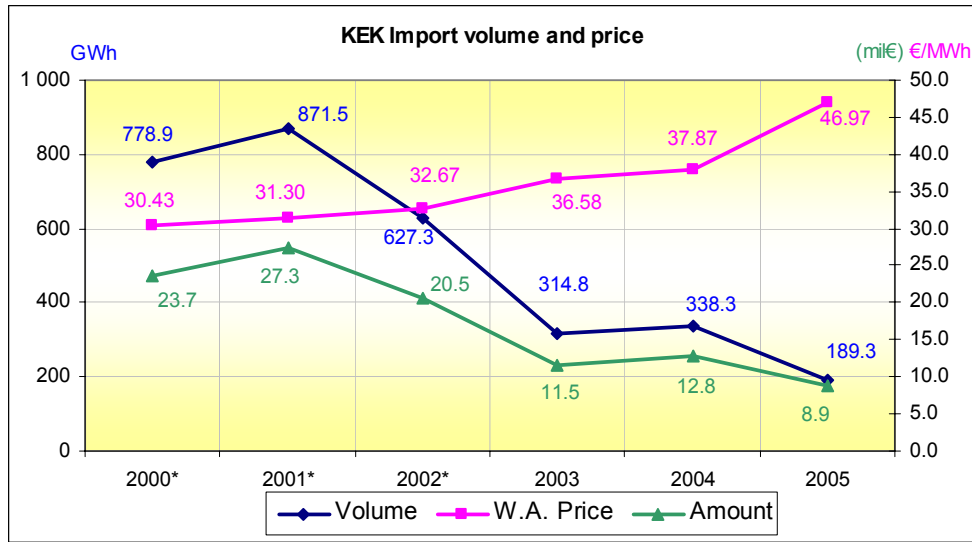
KEK Emergency Import	Volume	Weighted Average Price	Amount
	MWh	(\$)/€/MWh	(\$)/€
2000*	0	0.00	0
2001*	0	0.00	0
2002*	2 000	49.00	98 000
2003	61 216	49.00	2 999 584
2004	160 215	40.87	6 547 693
2005	160 035	48.94	7 831 754
2006* (I-V)	0	0.00	0

\*Note: In 2000 - 2002 prices are in US dollars (\$) at an exchange rate of approximately 1:1

Total Imported Energy in MWh (Contractual + Emergency + Exchange)	
2000*	782 760
2001*	1 017 495
2002*	770 185
2003	637 275
2004	650 640
2005	490 632
2006* (I-V)	274 561

In the period 2000 until May 2006 KEK has totally imported 4.57 TWh, 71.7 % of which is contractual energy, 8.4 % emergency import and 19.9 % exchanged import. Up to now KEK has spent € 130.2 mil. (contractual 86.6 % & emergency 13.4 %), whereas an overhaul exchanged coefficient is 1.6, meaning for one MWh of import KEK has to give back 1.6 MWh. The volume of import has been decreased, with the yearly average of 11% (without including import on 2006) while weighted average price has been increased for 10.7% on yearly average. Total expenditures for import have been decreased yearly for 5.9 % on average. These dynamics are illustrated in the diagram below.

Diagram 2: KEK import volume & price (2000 - May 2006)



\*Note: In 2000 - 2002 prices are in US dollars (\$) at an exchange rate of approximately 1:1

Prices in whole Europe have been increased since 2004 as a “spill over” result of increase in oil prices. This has also reflected KEK’s import prices, which are significantly increased above current SEE regional prices, which might be also explained by the constraints on KEK’s ability to contract, discussed above, or on difficulties in accessing regional suppliers due to transmission constraints and institutional and regulatory barriers to cross-border trade. It has to be emphasized that the Balkan’s “market” has very low liquidity and remains still at the hands of very few dominant players. Situation in SEE region regarding transmission interconnection capacity is very non-transparent even in the absence of real technical congestion because of the lack as yet of common regulatory framework for the calculation and allocation of transmission interconnection capacity under transparent methodologies to all market players. The implementation of a regional ITC mechanism has been one of the top priorities of CEER and ETSO/SETSO over the last few years. The scheme has encountered a few problems listed in the SEETEC report (*Study of the Obstacles to Trade and Compatibility of the Market Rules*) that are inherent to the adopted methodology. One underlying problem with the revenues or expenditures created by the ITC mechanism is the fact that the TSOs have incentives to maximize their net revenues (or to lower their disbursements to the fund) since TSOs are still not totally independent. In the absence of transmission tariff methodologies and clear rules regarding how to charge and credit the network users, the incentives for TSOs to try to maximize their revenues will be present. At the moment the situation results to a very limited third party access to the HV networks by a few selected market players, a very illiquid wholesale market and very high prices offered to Kosovo.

It seems reasonable to expect that KEK’s future import prices should converge to regional levels as the particular constraints on its attractiveness as a counterparty are relieved. However, a convergence with regional benchmark prices is unlikely to happen immediately. In particular, it will take time for potential suppliers to be confident that KEK can and will meet its obligations under any contracts that it enters into and for KEK to have sufficient certainty over funding to be

able to adopt a more effective contracting strategy. Increasing convergence with Western European markets would also be expected to lead to increases in SEE regional market prices.

The Energy Regulatory Office will continuously monitor the imports situation and we strongly recommend meticulous and correct planning and early contracting (even one year prior to the projected delivery time), in order to achieve lower import prices.