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There is no better opportunity presented in this life from the chance to work hard at a job worth doing…

(US President Theodore Roosevelt)

FOREWORD BY THE CHAIRMAN

In my second year as Chairman I am delighted to report that ERO has delivered another excellent performance and moved a step closer to fulfil its mission to become the key driving factor in Kosovo, on the establishment of an efficient energy market based on the principles of transparency and free competition.

2005 was a year with noteworthy performance for ERO and milestone developments include:

- The completion of the staff recruitment (24), while major training and capacity build-up activities continue
- The preparation of our 5-year Business Plan
- The preparation of a complete Market Model and associated Rules now under Public Consultation
- The adoption of our Pricing Rule and Tariff Methodology that allows the launching of our first Price Review for electricity sector in 2006
- The issuance of several items of Secondary Legislation that complete our Regulatory Framework
- The successful completion of our District Heating Price Review for the season 2005-06

These were the headline developments. In all parts of ERO there were important achievements every day from delivering good service and enhancing value for energy customers to representing Kosovo in various international fora.

The clarity of our core objective – to deliver a transparent and competitive energy market – means that we have a clear purpose and strong focus on what needs to be done.

I would like to convey my best thanks to all my colleagues for their endeavours and steadfast commitment and for the already accomplished achievements. Their expertise, professionalism and dedication are a guarantee for our meeting all the challenging targets staying ahead.

Nick F Frydas

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AD	Administrative Directive (UNMIK)
AI	Administrative Instruction (UNMIK)
BMZ	Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (Germany)
CBT	Cross Border Trade
CEER	Council of European Energy Regulators
CIDA	Canadian International Development Agency
DH	District Heating
DHC	District Heating Company
DHE	District Heating Enterprise
DS	Distribution System
DSO	Distribution System Operator
DSRSG	Deputy Special Representative of Director General (of UN)
EAR	European Agency for Reconstruction
EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECSEE	Energy Community in South East Europe
EIB	European Investment Bank
ERO	Energy Regulatory Office
ESTAP	Energy Sector Technical Assistance Project (WB)
EU	European Union
HPP	Hydro Power Plant
IEA	International Energy Agency
IPP	Independent Power Producer
ITSMO	Independent Transmission System and Market Operator
KCB	Kosovo Consolidated Budget
KEK	Korporata Enegjetike e Kosovës (Power Corporation of Kosovo)
KfW	Kreditanstalt für Wiederaufbau (Germany)
KTA	Kosovo Trust Agency
kW	Kilo Watt
kWh	Kilo Watt hour
MEF	Ministry of Economy and Finance (PISG)
MEM	Ministry of Energy and Mining (PISG)
MTI	Ministry of Trade and Industry (PISG)
MO	Market Operator
MOU	Memorandum of Understanding
MW	Mega Watt
MWh	MWh
PISG	Provisional Institutions of Self-Government
POE	Publicly Owned Enterprise
PPA	Power Purchase Agreement
RAB	Regulatory Asset Base
REM	Regional Electricity Market
SEE	South East Europe
SETSO	Southeast Europe Transmission System Operators
TA	Technical Assistance
TOR	Terms of Reference
TPA	Third Party Access
TPP	Thermal Power Plant
TS	Transmission System
TSMO	Transmission System and Market Operator
TSO	Transmission System Operator
UNOPS	United Nations Office of Project Services
UNMIK	United Nations Interim Administration Mission in Kosovo
USAID	United States Agency for International Development
WB	World Bank

CHAPTER 1: REVIEW OF DEVELOPMENTS IN THE ELECTRICITY SECTOR DURING 2005

The electricity sector in Kosovo continues to be dominated by the vertically integrated company, KEK. It is POE, assets of which are under custody (trust) of KTA, whose responsibility among others is to preserve or enhance the value, viability, and corporate governance of socially and publicly owned enterprises in Kosovo. KEK has 10 divisions with a total number of 8,375 employees. Its five core businesses are: lignite mines, power generation, transmission & dispatch, distribution, and supply. The mining division has 44% of total employees of KEK, whereas generation and distribution have respectively 19% and 13%. A monumental development in 2005 is the undertaking of the project of KEK incorporation which is expected to be completed during 2006. The final incorporation Project will determine two separate companies: the first one, KEK with mining, generation, distribution and supply functions; and the second one the ITSMO, with ownership of transmission assets and system & market operation responsibilities (in full compliance with ECSEE Treaty requirements). It is planned to transfer assets and liabilities of the old KEK to the newly created holding company KEK hold Co, and KEK New Co, the latter which will have 6 separate Divisions. A new company ITSMO will be established as a subsidiary, fully owned by KEK New Co, for a period until 2008, having the task of transmission of electricity and MO.

1.1 LIGNITE MINING

Lignite Mining is 98% dependent on KEK electricity production, whereas power output of KEK is 100% dependent on coal supply. This reciprocal dependence shows that the main Kosovo's energy recourse lignite is indispensable. Main lignite recourses are allocated in two big basins, named "Kosova" and "Dukagjini" with exploitable reserves of good quality, low content of sulphur and good concentration of lime. Estimated lignite deposits are amounted up to 14 billion tons. There are currently two open cast lignite mines (Bardh and Mirash) in operation, supplying 6.5 millions tons per year to KEK power generation units. Last estimation indicates that mines in operation will be completely depleted by 2012, with a significant decrease of output starting from 2009. This alarming issue stresses the need for investment in new lignite mine which has to come into initial operation in 2009. KEK has been issued with an exploration license for a new mine to be opened namely "SW Sibovc" but there are considerable difficulties in securing the financing of the necessary investments.

Table 1.1 Lignite Production and Consumption

Coal Production & Consumption (2005)	Ton
Total Coal production in tonnes	**6 536 759**
Total Coal consumption in tonnes	**5 796 658**

1.2 POWER GENERATION

KEK, power generation function is performed by two lignite fired power plants: Kosovo A (5 units) and Kosovo B (2 units). Total nominal capacity of both plants is 1,478 MW, which could have been sufficient for fulfilment of current Kosovo's demand for electricity. However, due to age, improper maintenance and operation during the years before and after the war and due to war damages, the reliability and net generation capacity of these plants have been seriously compromised. Hence Kosovo A in particular demonstrates small generating capabilities unless it is rehabilitated. The only other important plant outside of KEK is the HPP, Gazivoda/Ujmani (2 units of 17.5 MW each), administrated by the water company (Hydrosystem Ibër-Lepenc). In November 2005, a new HPP "Lumbardhi" began its operation. This plant is located in the South-Eastern part of Kosovo, around 15 km from the town of Deçan. It is owned by KEK and it is operated by Triangle General Contractors Inc. (TGC) under a 20 years lease agreement and PPA with KEK ("feed in" tariff). In this Project around € 6 million was invested for refurbishment increasing its capacity from 7.35 MW to

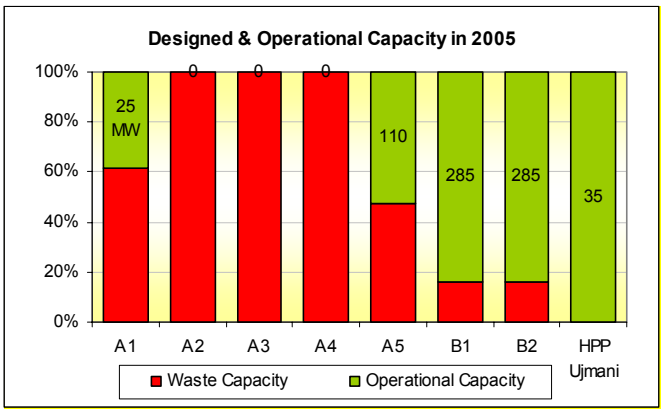
8.3 MW. Until the end of 2005 this HPP has produced 1.9 GWh. It is worth noticing that this is the first private project in Kosovo's energy sector financed by the "non recourse" method.

Table 1.2 Nominal and Operational capacity of the Power Units in 2005

Lignite Fired Power Plant	Years of Construction	Designed Capacity	Operational Capacity	Load Factor (designed)	Load Factor (operational)
Units	*year*	*[MW]*	*[MW]*	*%*	*%*
A1	1962	65	25	13.67%	35.55%
A2	1964	125	-	-	-
A3	1970	200	-	-	-
A4	1971	200	-	-	-
A5	1975	210	110	36.29%	69.28%
TPP Kosova A		**800**	**135**	**10.64%**	**63.04%**
B1	1983	339	285	54.60%	64.94%
B2	1984	339	285	66.60%	79.22%
TPP Kosova B		**678**	**570**	**60.60%**	**72.08%**
U1	1981	17.5	**17.5**	-	-
U2	1981	17.5	**17.5**	-	-
HPP Ujmani		**35**	**35**	**36.39%**	**36.39%**
Total		**1 513**	**740**	**33.62%**	**68.74%**

Note: Load Factors of designed and operational capacities are calculated based on gross production of the power plants

Figure 1.1 Nominal and Operational capacity of the Power Units in 2005



1.3 TRANSMISSION AND DISTRIBUTION

Kosovo's TS consists of the network assets at voltage levels of 400, 220, & 110 kV, while the DS consists of the network assets at 35, 10, & 0.4 kV. TS is an integral part of regional interconnected TS and is interconnected with all neighbouring systems at 400 kV level, except with Albania (only at 220 kV). A new interconnection line of 400 kV with Albania is considered vital for implementation of considerable energy exchanges in medium and long term between Kosovo's system based on base load lignite-fired thermal power plants and Albania's system based on hydro power plants. The total length of this 400kV overhead line is 239km which part spread in Kosovo's territory is 85.5 km long with a total cost of €39.3m. Construction of the line is foreseen to start in 2008 and to be accomplished by 2010.

KEK DS is spread throughout seven centers of Kosovo: Prishtina, Ferizaj, Gjilan, Gjakovë, Pejë, Prizren and Mitrovicë, and it, supplies 331,844 customers. During the year 2005 KEK identified around 103,026 so called passive customers. KEK is in the process of clearance that will happen in

2006. This may result in additional 50,000 customers. In this estimation are not considered customers in the Serbian enclaves. Finally expectation may bring the total number of customers above 400,000.
Transmission and Distribution Systems in Kosovo are suffering for many years now, due to lack of investment and proper maintenance of infrastructure. The systems presently do not meet several technical standards. For instance reliability criteria n-1 cannot be met and quality of voltage is lower than is required. The safety standards in the distribution network particularly in the connection points of customers are under the required international practice. For that reason KEK Financial Recovery Plan is based on performed studies envisaging capital investment in transmission and distribution network in the amount of €395m up to year 2010.

Table 1.3 Transmission & Distribution System characteristics

TS & DS System	*Unit*	Transmission System			Distribution System			
Voltage Level	*kV*	400	220	110	35	10	-	-
Lines length	*km*	183	354	625	639.5	3971	-	-
Cables length	*km*	-	-	-	10.5	172	-	-
Transformation Level	*kV*	400/220	220/110	220/35(10)	110/35	110/10	35/10	35/6
Transformation Capacity	*MVA*	1200	1000	400	788	378	813.7	98

Note: KEK distribution did not consolidate until now the data about transformation 10/0.4kV and the length of the 0.4 kV network.

1.4 ELECTRICITY DEMAND

The period 2000-2005 has been characterised by substantial growth in electricity demand in Kosovo. Annual average growth is approximately 8%, whereas growth from 2004-2005 has even reached 10%. Total Net energy demand imposed to the system for 2005 was approximately 4.5 TWh with the winter peak demand reaching 898 MW, even though this energy and peak demand have been registered with the load shedding regime. This growth is not reflecting equal rates of economic development and in the case of Kosovo it can be attributed to the very low payments of the electricity bills and the weak enforcement tools by the utility company to collect the money, both creating unfortunately the environment for uncontrollable increase of electricity consumption. Electricity demand growth rate in Kosovo could be much higher, if we consider the potential increase of industry demand which currently represents only a very small percentage of total electricity consumed, however most of industrial sites are in the process of privatisation and it is considered that their consumption will be increased after they are put again in operation. A Load Shedding regime was applicable during the whole year 2005. During winter the so called 4:2 regime (4 hours with; 2 without electricity) was applied, whereas there has been even worse applied regimes (3:3) in some cases during very low temperatures and when import of electricity was not available. During summer the regime was 5:1 and 24:0 when there was low demand, particularly during night.
The fact that only 52% of the delivered electricity (in kWh) is billed, from which only 66.6 % is collected in money terms, does not generate the necessary funds required to invest in energy capacities (generation and network).

Table 1.4 Power Balance: Forecast 2005 - Actual 2005 - Forecast 2006

KEK Power Balance	Forecast 2005	Actual 2005	Forecast 2006
Production in each unit	*GWh*	*GWh*	*GWh*
A1	119.9	77.8	0.0
A3	0.0	0.0	430.6
A4	0.0	0.0	0.0
A5	667.7	667.6	348.0
TPP Kosova A	**787.6**	**745.5**	**778.6**
B1	1 676.9	1 621.3	1 772.1
B2	1 813.7	1 977.9	1 932.6
TPP Kosova B	**3 490.6**	**3 599.2**	**3 704.7**
HPP Ujmani	**79.2**	**111.6**	88.0
Import	**399.9**	**490.6**	685.6
Total Available Energy	**4 757.3**	**4 946.9**	**5 256.9**
Consumption	*GWh*	*GWh*	*GWh*
PP Self Consumption	**403.6**	**457.2**	**420.2**
Direct & Internal Consumer	**413.0**	**97.2**	**359.9**
Transmission Losses	**129.1**	**280.6**	**138.0**
Export	**87.3**	**226.0**	**210.7**
Distribution Losses	**1 101.6**	**1 875.0**	**1 507.3**
Net Distribution	**2 622.7**	**2 010.9**	**2 620.2**
Total Demand	**4 757.3**	**4 946.9**	**5 256.3**

The central (yellow) column indicates Actual production, import, consumption and export. The average self consumption of the Power Plant (PP) is approximately 10.3 %.

Table 1.5 Net Consumption by categories of customers

Consumed in 2005 by:	GWh
Industry	151.3
Comercial & Public	410.9
Houshold	1 447.9
Total Net Distribution	**2 010.1**

Figure 1.2. Production and Import in 2005

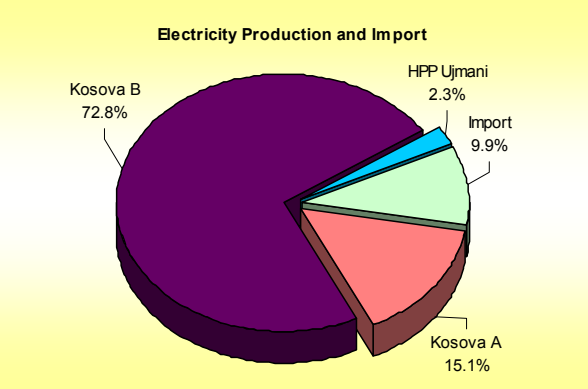


Figure 1.3 Consumption by customer class, Losses and Export in 2005

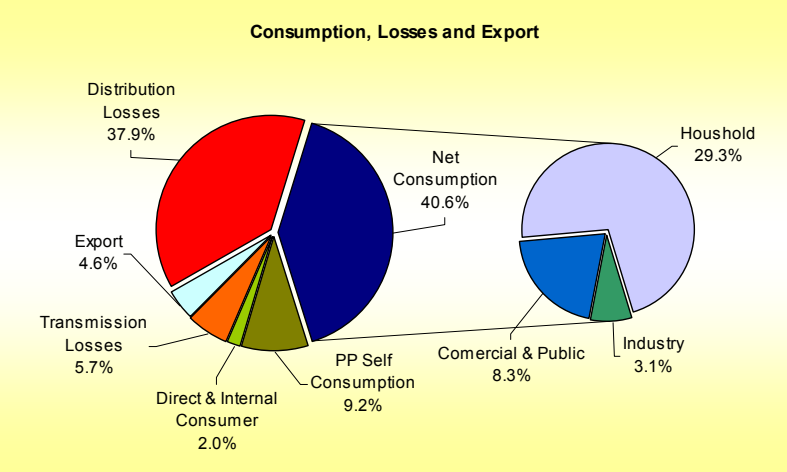


Table 1.6 Total billed electricity & losses

Billed electricity in 2005	*GWh*	*%*
Electricity delivered in the system	4 489.7	100.00%
Transmission Losses	280.6	6.25%
Distribution & Commercial Losses	1 875.0	41.76%
Billed in all categories	**2 334.0**	**51.99%**

Total billed electricity in 2005 is 2,334 GWh, comprising of net consumption of 2,010 GWh (distribution customers as stated in Table 1.7), consumption of 97.7 GWh by direct & internal customers and of export of 226 GWh.

Table 1.7 Monthly collection rate

Monthly billed & collection rate	Billed	Collection (Paid)	
	m€	*m€*	*%*
Jan	13.4	5.6	42.0%
Feb	13.5	6.6	48.6%
Mar	12.8	8.0	62.4%
Apr	9.5	8.4	88.5%
May	9.0	7.5	83.6%
Jun	8.5	5.8	68.5%
Jul	8.1	6.0	74.0%
Aug	7.9	5.9	74.5%
Sep	8.3	6.7	81.5%
Oct	10.6	5.8	54.6%
Nov	11.4	7.1	61.8%
Dec	12.0	9.8	81.7%
Total	**124.9**	**83.1**	**66.6%**

Table 1.8 Number of Customers in 2005

Category	No. of Customers
220 kV	1
110 kV	2
35 kV	12
10 kV	224
0.4 kV I	730
0.4 kV II - Two tariff	23 559
0.4 kV II - One tariff	19 458
Domestic - Two tariff	219 357
Domestic - One tariff	57 417
Flat rate	10 733
Public Lightening	354
Total Customers	**331 847**

1.5 ELECTRICITY IMPORTS AND EXPORTS

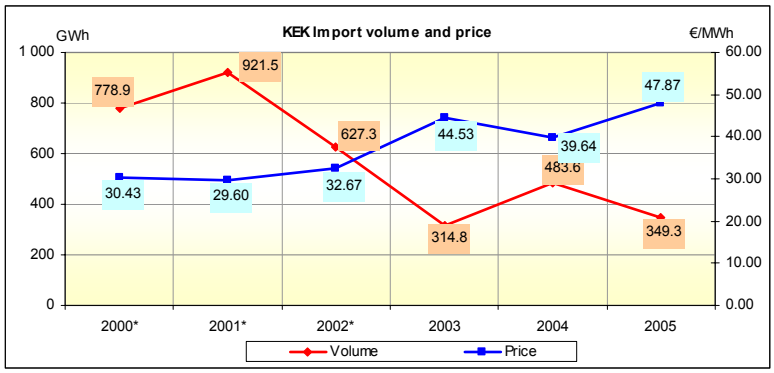
Due to rapid increase of demand and lack of operational internal capacities, KEK has continued importing considerable amount of electricity for attaining 4:2 and/or 5:1 supply regimes. Historically, KEK decreased the amount of imported electricity but the weighted average price of import has been increased by 20.7 %. During 2005 KEK imported 490.6 GWh, contracted (71.8 %) and exchange (28.8%). The average coefficient for exchange in 2005 was 1.3, meaning for each MWh that KEK imported, it has to give back 1.3 MWh as exchange. Most of imported energy is modulated (from 07:00 – 23:00) and for emergency as required, with a price variation from €38/MWh up to €63/MWh . In 2005 KEK exported 225.9 GWh, contracted (18.0 %) and exchange (82.0%). Contracted amount is characterised by non qualitative electricity (surpluses during night and/or non peak hours), resulting in very low prices.

Table 1.9 Historical data of electricity imports (2000-2005)

KEK Import	Volume	Price	Amount
Year	*MWh*	*($) €/MWh*	*($) €*
2000*	778 870	30.43	23 701 412
2001*	921 485	29.60	27 276 960
2002*	627 265	32.67	20 491 605
2003	314 794	44.53	14 016 421
2004	483 580	39.64	19 170 646
2005	349 335	47.87	16 723 315
Total spent on import from 2000 - 2005			**121 380 358**

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

Figure 1.4 Price & Volume of electricity import (2000-2005)



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

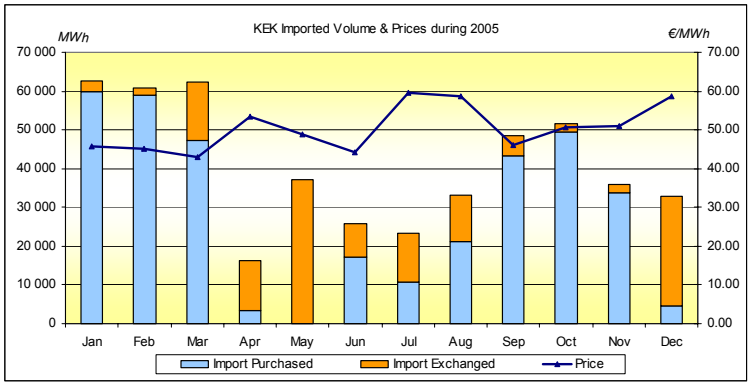
The variations in the volume of import are related to plant outages and available money for import. At the beginning, imported volume was very high because of refurbishment of plants and fire on Kosovo B, whereas import was reduced particularly in 2003 when three units of Kosovo A were available and particularly units of Kosovo B showed high availability. Import volume has been increased in 2004 due to very low availability of Kosovo A units.

Table 1.10 Monthly import & export in 2005

KEK	Import (purchased)	Price	Import exchanged	Export (sold)	Price	Export exchanged
2005	*MWh*	*€/MWh*	*MWh*	*MWh*	*€/MWh*	*MWh*
January	59 750	**45.86**	2 875	0	-	10 170
February	58 890	**45.07**	1 820	0	-	4 960
March	47 180	**42.90**	15 085	3 864	**20.00**	3 660
April	3 250	**53.50**	13 130	336	**18.50**	3 000
May	0	-	37 040	0	-	8 150
June	17 220	**44.23**	8 580	0	-	40 830
July	10 695	**59.47**	12 650	32 690	**30.18**	27 420
August	21 240	**58.59**	12 070	0	-	17 645
September	43 430	**45.97**	5 215	0	-	17 890
October	49 300	**50.81**	2 380	2 820	**38.83**	29 970
November	33 660	**50.82**	2 220	980	**27.30**	16 790
December	4 720	**58.70**	28 232	0	-	4 790
Total	**349 335**	**47.87**	**141 297**	**40 690**	**29.65**	**185 275**

Total amount of money spent on import in 2005 is €16.7m, without including the amount of exchanged import, which with a coefficient of 1.3 is estimated to be approximately 39 €/MWh (approximately €5.65m). At the same time only €1.2m was collected from export, which clearly results in a deficit in electricity import/export trade.

Figure 1.5 Price & Volume of electricity import in 2005



Note: There was no purchased import in May; price is average of April and June

1.6 KEK FINANCIAL RECOVERY PLAN

A draft version of the Financial Recovery Plan for KEK is under development by KEK management. Financial Recovery Plan developed for KEK covers the period from 2005-2010 and defines principles on which the plan is based and objectives that have to be achieved. It is stated that KEK is in a very weak financial position as it is facing continuing trading losses. Accumulated losses up to 30 June 2004 are €458.6 million. This weak financial position has been attributed to:

- poor revenue collection performance;
- dependence on old and unreliable generating plants (high level of planned and forced outages); and
- import of expensive electricity to make up shortfalls

There has been an evaluation of investment requirements for the period of 2005-2010, which if implemented will return KEK to a financially healthy enterprise. Total investments needed in all sectors of KEK for this period are approximately € 800m, of which around 60 % will be coming from internal funding and 40% from grants. The plan assumes an increase in cash collection to 80 % in 2010. ERO makes it clear that this is a draft version, which might be subject to comments and changes.

1.7 INCORPORATION OF KEK

Incorporation/restructuring Project has been initiated by EAR and KTA. It is noted that KEK restructuring should be compliant with EU directives and should also result in a separation of non-energy activities and related assets (if any), leaving them out of the new energy business structure.
The proposed structure of the incorporation as it is described in the preface of Chapter 1, complies with the Energy Law requirements in respect to the transmission activity, as it recommends the establishment of ITSMO as JSC under control of shareholders of Transco Holding company performing the activities of TSO and MO as a separate legal entity. On the other hand the remaining part of the old KEK with duties to perform the functions of mining, generation, distribution and electricity supply, named as JSC KEK New, is under control of KEK Holding. Restructuring of KEK should support free access of third parties to both networks, transmission and distribution, resulting in no influence and control in areas of power generation, supply and trading as main attribution of future power market development.
Final assignment of the process of incorporation will result in assets registers and liabilities being transferred to above mentioned companies. The incorporation should be considered as a precondition for further commercial operation of newly established companies.

1.8 ENERGY STRATEGY OF KOSOVO FOR 2005 – 2015

Energy Strategy of Kosovo has been prepared by MEM in full accordance with the Law on Energy and Kosovo Government Program and it contains the fundamental framework with a flexible orientation taking into consideration development and time perspective for fulfilment of its objectives. Strategy is designed based on previous studies (ESTAP, KfW, White Paper) and feedback engaged by EAR and RIINVEST institute.

Goals and long term activities comprise a period of 10 years, having as a vision in some key areas of an even longer time period. Within this period Kosovo is foreseen to possess generation capacities for electricity of at least 1,800 MW, to provide steady supply for its customers and export 30-50% of generated electricity. Other very important objectives are improvement of the energy sector, through finalisation of KEK restructuring and reformation and increase of its competitive advantages, ensuring full revenue collection of billed electricity by 2009, followed by advancement of transmission and distribution network for reducing technical and commercial losses, while ensuring its full integration with the regional and European energy network. Key objective of Energy Strategy is to guarantee safe and sufficient lignite supply during the whole period of operation of existing power plants and securing fuel supply to new power plants that are anticipated to be built. Three zones have been identified with the potential to develop new lignite mines, of which Sibovc field is the most important one, with sufficient reserves (approximately 1 billion ton) to supply 2,000 MW of installed capacity for a period of 40 years.

It is stated that private investor's participation in different segments of the electricity industry in Kosovo is necessary, which will need to be involved in the current lignite mining operations and opening of new ones. Existing mineral resources of good quality and possibility of their exploitation at low cost should ensure coverage of mining operations, reasonable profit for private investors and suitable level of incomes for the State budget. Lignite resources offer a possibility for construction of new power plants. New IPP can supply the domestic market and the regional market of South Eastern Europe (SEE).

The vision is that the energy sector of Kosovo will be technologically advanced and financially viable and will become a part of the regional and European energy system. During this period the sector will transform and develop from dependency on budgetary funds and subsidies to a sector that will contribute to viability of Kosovo's budget; and from importing sector to a very important regionally exporting sector.

CHAPTER 2 ELECTRICITY MARKET MODEL PROPOSAL

Many countries around the world have taken steps towards reforming their electricity industries in ways that create competitive markets in order to introduce efficiencies and market discipline in their previously monopolistic energy sectors. The usual approach focuses initially on the wholesale level, where the outputs of a set of competing generation plants are offered into a "market place" from which retailers and other load-serving entities purchase energy in bulk, and the market is therefore cleared producing an underlining price. Because of the unique physical characteristics of electricity as a commodity, namely the non-storability, the effect that the commercial path is not necessarily the physical path of delivery, and the need for continuous balancing of the system as well as the need for the provision of special services for system stability (ancillary services)' electricity market models have quite sophisticated designs and complicated rules. One important issue in designing a market model is the allocation of rights and responsibilities among all parties in the market. The process by which, the allowed transactions and financial liabilities between those parties are determined is managed by the MO (Clearing of the Market and Settlement), while the System Operator's main role is "real-time" physical balancing and allocating the "usage" of the system. Generators, suppliers, interconnector traders and other parties that trade electricity accede in the market in the capacity of trading parties and their rights and obligations are pointed out in the Market Rules. Above all however is the interface between the real time balancing and operational activities performed by the system operator and the commercial arrangements for scheduling, imbalances, congestion management and ancillary services and how they are integrated with spot prices that determines the success of a market model.

Pursuant to requirements of the Law 2004/10 "on Electricity", Kosovo must implement a competitive market model in its electricity sector and this task is given by the Law to the entity "Market Operator" (MO) nominated by the Government while in accordance to the Law Market Rules should be approved by ERO. The MO must operate independently from any enterprise engaged in any electricity activity other than transmission. This entity may be the same entity as the TSO, whose responsibilities are indicated in the same Law on Electricity. KEK's incorporation project still under process, establishes indeed an independent entity called ITSMO that encompasses both activities with unbundled accounts between them. Meanwhile for 2005 as a MO had not yet been designated, ERO whose mandate is to promote the establishment of a competitive market undertook the obligation with the agreement of the Government to develop a Market Model and associated rules (Trade Code or Market Rules – secondary legislation). The development of a complete and workable Market Model, which is now under public consultation, is one of the two major tasks (the other being the development of a complete Tariff Methodology) undertaken with success by ERO in 2005.

In developing a Market Model and associated rules ERO considered both the pre-requisites for a successful market and the needs and priorities of Kosovo's electricity sector. The fundamental elements that provide the necessary preconditions for the development of a competitive and liquid market are: a supply situation that exceeds demand; a framework for non-discriminatory TPA to networks; responsiveness of both generation and load to price signals which implies also a modern metering and telecommunications infrastructure; many buyers and many sellers – lack of market power on both sides; and Treatment of subsidies and environmental controls so that they do not interfere with the workings of the market. It is obvious that none of those pre-conditions currently exist in Kosovo and most will not be fulfilled in the foreseeable future. ERO's price review resulting in a new set of unbundled tariffs by the end of 2006 (Chapter 3) will remove any cross-subsidies, and will provide a cost reflective framework for TPA, other elements however will continue to be missing.

On the other hand KEK's weak financial position and Kosovo's desperate security of supply situation require a framework to attract private investors in generation (but also as eligible customers in industry) that will have both a competitively priced wholesale sector and the framework to evacuate their output to the regional market.

The solution that ERO proposes is a "simulated market" with hourly prices and a real-time balancing mechanism reflecting real generation and import costs, so that the appropriate economic signal is

given to prospective investors and the correct incentive is provided to suppliers (currently KEK), importers/exporters and eligible customers to contract correctly and avoid imbalances. The model is a simulation of what a competitive market should deliver i.e. rational pricing with a price shape that reflects a merit order of dispatch with fixed costs recovered predominantly from when there is little spare capacity. Costs-based revenue stream reduces risk. Reasonable risk entices risk capital rather than reliance only on price guarantees. Risk environment that can support private capital only works with rational pricing.

The model produces: hourly prices varying by demand - basis of prices are estimated generation costs (Model allocates fixed costs to each generator, dispatches generators in merit order, allocates fixed costs including return on investments to times of higher demand in proportion to level of spare capacity at time); and model uses an imputed value of lost load for unserved demand which is considered the cost of standby small generators in abundant use in Kosovo. The results are visible prices for measuring contracts that eligible customers might make; a balancing mechanism producing an imbalance price and avoidance of which sets the market price. This model also will apply in the price review of the Transfer Price between the generation and supply arms of the dominant party (KEK).

The type of the model chosen is "Net Pool"with real-time balancing mechanism (regulated bids and offers in the transition period) with capacity certificates to incentivise new generation capacity. The "Net Pool" has been chosen as this model handles interconnector trading more easily, and it would be more attractive to a prospective investor who would be looking also to export to the regional market. In this type of market most of energy is settled through bilateral contracts, which defines energy bought/sold in MWh in each settlement period (1 hour); there is Self Dispatch and a Mechanism for residual balance, while residual imbalances go into settlement; there is of course incentives to balance through ex-post imbalance pricing albeit in the initial transitory period bids and offers in the balancing mechanism will have Price Caps set by ERO at the variable costs of units. As mentioned above the model produces simulated market prices because of insufficient trading liquidity for full market. ERO will use simulation to derive KEK generation wholesale transfer price and also will use simulation for bid and offer pricing. The model is further explained below.

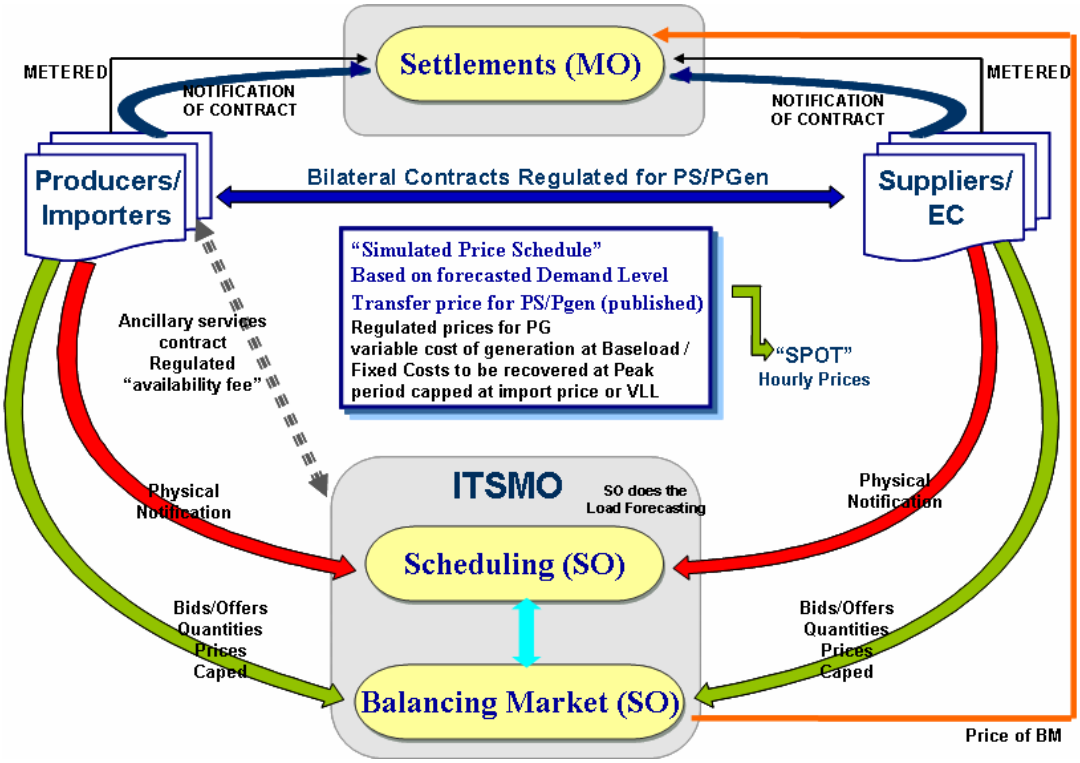
In order to incentivise newly built generation capacity and in the absence of long term PPAs as prohibited by the Law on Electricity, ERO decided to introduce also in the market model Capacity Certificates (CAC). Briefly the model is as following:

- Supplier obligation to hold; Supplier obligation covers the security requirement (i.e. peak demand + X% reserve margin set by ERO)
- Sold by generators; Generators declare availability and are awarded preliminary certificates; TSO has short-notice testing right on that availability and can require certificates to be returned on failure; Generator can return certificates where not passed on to suppliers or else must buy out other certificates from the market (or pay the penalty); Generators sell certificates to suppliers
- MO registers all certificate transfers; Importers awarded certificates for each MWh imported (valid for hour in which import occurred); Exporters must acquire a certificate for each MWh exported (valid for the hour of the export); At settlement, MO calculates how many certificates each supplier or exporter requires (based on demand in that hour); MO calculates how many certificates are required by each and applies a penalty for each MW shortfall in the hour; Prevailing penalty rate calculated by MO
- Penalty for not holding; Valuation based on efficient procurement of security of supply; Peak penalty rate calculated in Regulatory Annex; Penalty rate for an hour is proportional to overall shortfall in number of certificates relative to the reference point calculated for the peak penalty rate; No national shortfall = no penalty; Hoarding of certificates will not penalise those who have none; Penalty level in an hour will be determined by demand level and net exports

The purpose of the incorporation of CACs in the model is to stimulate security of supply and ensures that the fixed costs of older generating unit will be recovered. It also guarantees an income to

refurbished Kosovo A units and contribution to finance new build. Modelling suggests about €50m per year will be spent on CACs.

Figure 2.1 Market Design – Net Pool



As it is noted the main bulk of transactions in electricity are done through bilateral contracts agreed between trading parties and it is only residual imbalances that must be settled through market. The contracts can be physical or financial comprising among others main 4 elements: a defined period, a defined amount of electricity, a defined location and price. Imbalances are measured as the difference between metered energy and contracted energy.

While performing its activity for managing imbalances, System Operator publishes its long-term forecasts (annual forecasts) of maximum expected demand and the average hourly demand (each in MW) of each month in sufficient time to assist bilateral contracting for the purpose of avoiding imbalances. The model makes provisions for the purchase of ancillary services under regulated prices and has detailed arrangements for the participation of importers/exporters through the interconnectors. System Operator calculates and publishes required Reserve Margin, which is the amount of capacity over the forecast demand that is necessary for securing TS.

The Model incorporates a real-time "Balancing Mechanism" for deviations from anticipated consumption and/or scheduled generation. However in the transitory period bids and offers in the Balancing Mechanism will be capped (regulated). The imbalance price is derived as a weighted average of the prices of all untagged bid or offer acceptances in the Balancing Mechanism that have been accepted to mitigate the energy imbalance. This means that any acceptances that are in the opposite direction to market imbalance are excluded from price setting (i.e. if the market is long – contracted off take exceeds metered off take – then all Offer Acceptances are ignored because they actually contribute to lengthening the market rather than bringing the market into balance. Similarly, bid acceptances are ignored in setting the Imbalance price in a short market.

As explained above in the presence of a dominant player for the time being the model calculates a "simulated" hourly market price from where the transfer price between KEK Supply and KEK generation will be derived on the basis of full cost recovery for generation. This price curve will be

published a day (or two days) ahead and will act as the appropriate economic signal for eligible customers, importers/exporters and prospective investors. The purpose of a "simulated" market price is to set rules by which dominant participants can recover a regulated income over a year in a manner that might prevail if a fully competitive market were available. The resultant prices can be used to determine the price at which reserve should be offered as well as the prices at which balancing mechanism offers should be priced. There is also a requirement to determine a set of regulated prices at which the Public Supplier will purchase the output from the Ujmani Hydro-Power Plant (HPP), which is obliged by the Law to offer its output to the Public Supplier. The nature of the delivery offered from this facility suggests that part of the energy should be priced at base load but some of it should be at a premium price because it is delivered during peak times.

The dominant party is required to provide ERO with a breakdown of its variable costs together with a breakdown of its fixed costs of generation for each of its generating units. The costs of generation unit other than dominant party will be determined by statistical estimation, international survey and enquiry of generators and interconnector traders. For each generating unit its variable costs will be the sum of these costs converted appropriately into a cost per MWh delivered to the TS. These costs will be used in the annual modelling of the Kosovo wholesale market.

We consider this model fully compatible with all proposals in the REM and it provides us with the maximum flexibility to integrate into any future regional development. A "Gross" (or obligatory) pool model would have been much more inflexible regarding nominations through the interconnectors. The results of the model in the formation of the wholesale prices will depend from the assumptions taken during the Price Review. We must also note that at present this is a proposal and that the final Market Model has to be fully developed, elaborated and "fine-tuned" by ITSMO, obviously during the course of TA that it is currently receiving. ITSMO has to present to ERO the final product for approval. Ideally ERO would like to see it coming into force on 1st January 2007.

CHAPTER 3 ELECTRICITY TARIFF METHODOLOGY AND PRICE REVIEW

During 2005 the basis for the economic regulation of the electricity sector by ERO has been founded through two important rules (secondary legislation) that have been developed and adopted: "Rule on Principles of Calculation Tariffs in the Electricity Sector", and the "Tariff Methodology for Electricity Sector" plus the associated legislation in the form of regulatory acts comprising the "Regulatory Accounting Guidelines" and the "Implementation Plan" for ERO's first Price Review that will happen during the year 2006.

3.1 RULE ON PRINCIPLES OF CALCULATION OF TARIFFS IN THE ELECTRICITY SECTOR (PRICING RULE)

In accordance with Chapter 9 of the Law on the Energy Regulator No. 2004/9, the Board of ERO issued the Rule on the Principles of Calculation of Tariffs in the Electricity Sector in Kosovo (the "Pricing Rule") in public session on 15 December 2005. The Rule was subject to an extensive consultation process.

Purpose

The Pricing Rule describes the process by which ERO:

- determines allowed revenues to be recovered by energy enterprises from regulated tariffs;
- receives applications by energy enterprises for the approval of regulated tariffs; and
- reviews and issues a decision on regulated tariffs.

It also describes:

- how appeals can be made against ERO decisions; and
- the requirements for publication of approved regulated tariffs.

Review and approval of regulated tariffs

The Pricing Rule establishes two separate routes for the review and approval by ERO of regulated tariffs, depending on whether the costs to be recovered under the approved tariffs are pre-determined for a number of years (performance-based rates) or assessed annually, at the same time as the tariff application.

Under **performance-based rates**, ERO determines the maximum allowed revenues to be recovered from regulated tariffs by a licensee in advance of receiving a tariff application. These revenues are set for a number of years ahead (a price control) during the course of a price review. The principles governing the determination of allowed revenues and their adjustment during the period of the price control are separately set out in a tariff methodology.

Once a decision on allowed revenues for the coming price control period has been issued by ERO, at the end of the price review, licensees then submit an application for approval of their regulated tariffs. This application must demonstrate that the revenues to be collected under the regulated tariffs conform with, those allowed under the price control, and that the structure of the regulated tariffs is consistent with the principles established in the tariff methodology. If ERO is satisfied, on review of the application, that these requirements are met then the tariffs are approved. Otherwise, ERO can either require amendments to the proposed tariffs or reject the application entirely and require a new application to be submitted.

Where tariffs are regulated under **non performance-based rates**, then the tariff application submitted must include evidence of the historic and forecast costs of the licensee, to be recovered from the proposed tariffs, and justification for these. As reviewing these costs will take additional time relative to applications under performance-based rates, where ERO is only required to ensure compliance with previously determined allowed revenues, the period allowed for review of non performance-based rates applications is substantially longer.

Under the Tariff Methodology issued by ERO, network tariffs and the retail margin earned by the public supplier will be set under performance-based rates. The simulated wholesale electricity market price and resulting regulated sales price from existing generators will be determined annually under non performance-based rates given the very significant uncertainties surrounding the costs of imports and capital expenditure programmes.

Stakeholder participation
The Pricing Rule requires that ERO notify stakeholders of the beginning of a price review or the receipt of a tariff application and that sufficient time is allowed for comments on these. It also requires ERO to hold a public hearing whenever reviewing public supplier tariffs (the final tariffs charged to non-eligible customers) and on other occasions where possible. ERO is also committed, under the Pricing Rule, to publish all papers, data and submissions received and all ERO documents related to a price review or tariff application on its website, subject to standard commercial confidentiality restrictions.

Challenges and appeals
Stakeholders have three routes by which they can challenge an ERO decision relating to a price review or tariff application. They can apply for reconsideration of an ERO decision within 15 days, on grounds including the existence of new evidence, a change in law or an error of fact or law. ERO is given 15 days to determine whether to accept the application and, if it does so, a further 30 days to undertake its reconsideration and, if it considers it merited, issue a revised decision.
Stakeholders can also request an Expert Review of an ERO decision, within 15 days of it being issued. If stakeholders are dissatisfied following any reconsideration or Expert Review, then they can appeal to the courts for the annulment of ERO's decision.

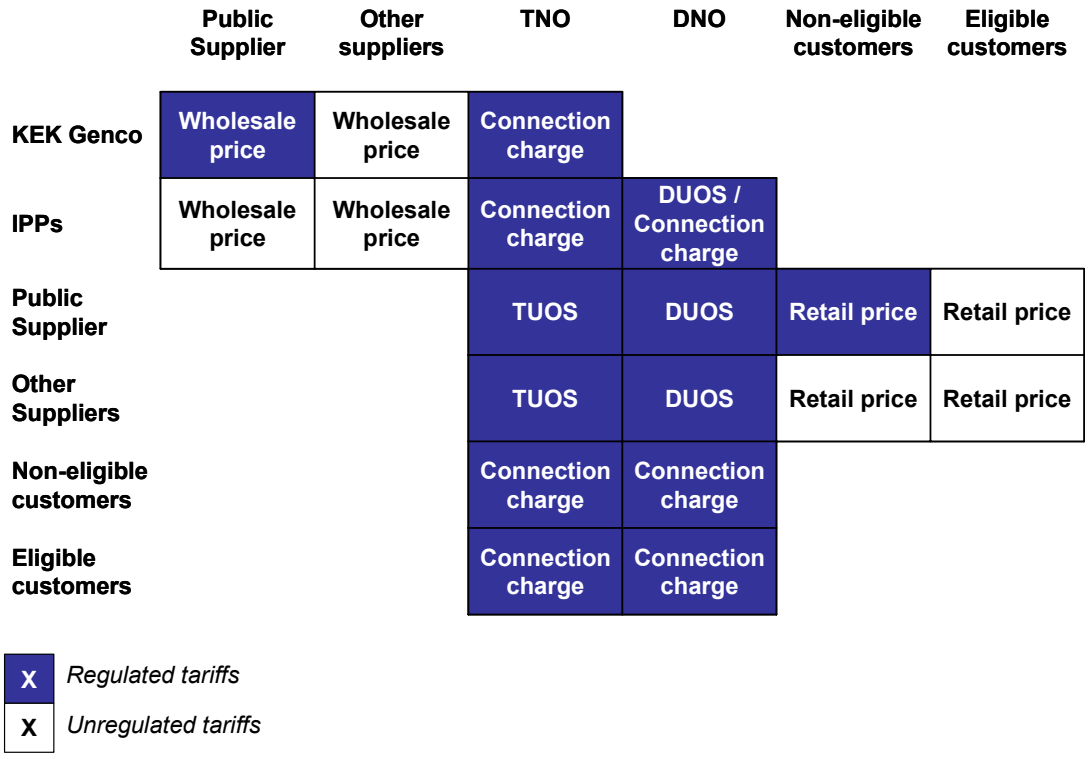
3.2 TARIFF METHODOLOGY

The Tariff Methodology was adopted by ERO's Board in public session on 15 December 2005, in accordance with Article 46 of the Law on the Energy Regulator requiring the development and issuing of the Methodology.

Purpose
The Methodology details how ERO intends to determine the allowed revenues to be recovered by licensees from regulated tariffs and the principles that ERO expects regulated tariffs proposed by licensees to conform with.

Definition of regulated tariffs
Under the provisions of the Law on Electricity and Law on the Energy Regulator, regulated tariffs are defined as those applying to sales from generators with capacity in excess of 5MW operating on the date of promulgation of the Law (30 June 2004) to the public supplier, for connection to and use of the transmission and distribution networks and from the public supplier to non-eligible customers. Other tariffs, although not directly regulated, remain subject to oversight by ERO where charged by a dominant entity to ensure that they are cost-reflective and not unduly discriminatory. Figure 3.1 illustrates those tariffs, which are regulated and unregulated in the Kosovar electricity industry.

Figure 3.1 Regulated and unregulated tariffs



Regulated generation tariffs

ERO is concerned to ensure that the regulation of generation tariffs does not introduce new distortions into the wholesale electricity market by, for example, keeping market prices below the costs of new investment even where a capacity deficit exists. Under the draft Market Rules, ERO envisages a Wholesale Market Simulation Model, the parameters of which are approved by ERO, being used to set allowed prices, bids and offers submitted by dominant generators, as explained in Chapter 2 above. The prices emerging from this WMSM will also be used to set the regulated tariffs charged by existing generators for sales to the public supplier. This will ensure consistency between prices in the wholesale market and those included in PPAs with the public supplier. Where this leads to regulated generators earning revenues in excess of their reasonable costs, as assessed by ERO, the difference will be returned to customers.

Regulated generation tariffs will be reviewed annually in accordance with provisions in the Law of Electricity regarding PPAs with the public supplier and with the envisaged use of the WMSM under the Market Rules.

Where the public supplier is required to purchase at unregulated prices then ERO will review, on an annual basis, the reasonableness of the charges included in PPAs for this purpose.

Regulated transmission and distribution tariffs

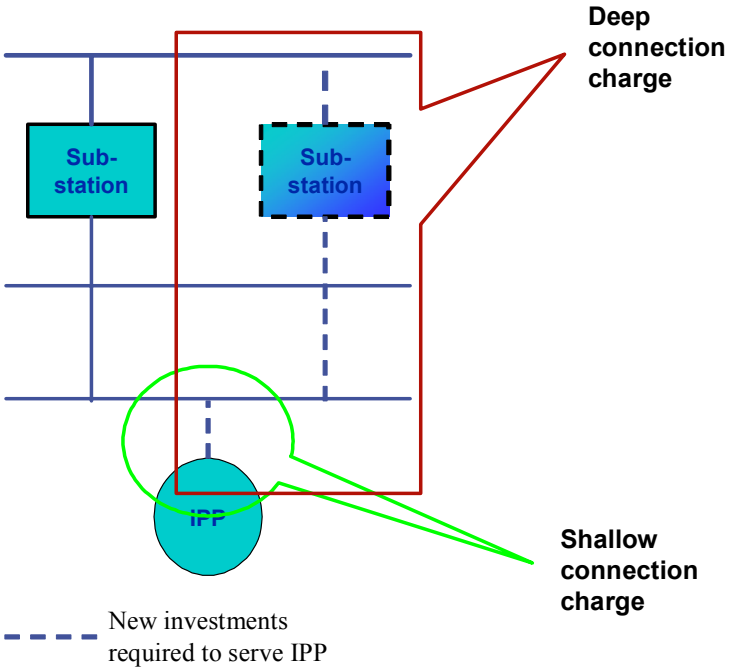
Transmission and DS operator costs will be recovered through use of system (UOS) charges and connection charges.

Connection charges

Given the small size of the Kosovar system and the existing poor reliability of the system, connecting major new users is likely to require large-scale network investments. To ensure that users recognise these costs, ERO will require all users connecting to TS and all generators with a capacity exceeding 5MW connecting to the DS to pay 'deep' connection charges. These include the costs of the direct connection to the existing network and any investments required to reinforce the existing network to accommodate the new load at other locations. Other users will pay a 'shallow' connection charge,

covering the costs of their direct connection alone. The difference between the two charges is illustrated below. The smallest customers, where located close to the existing network, will pay a standard shallow connection charge.

Figure 3.2 Deep and shallow connection charging

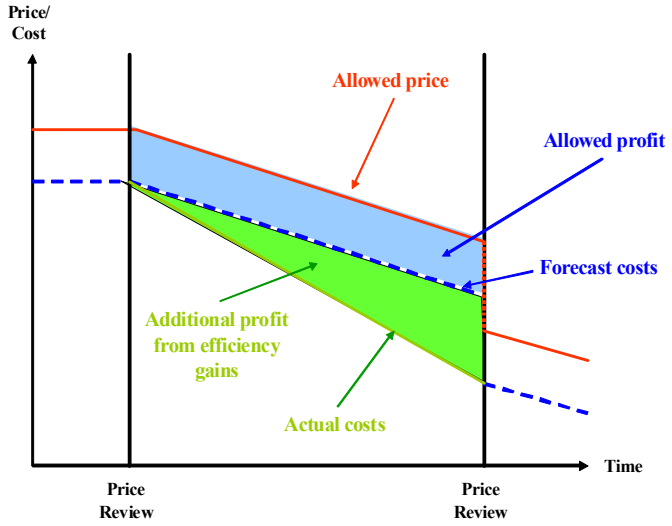


Transmission and DSO's will be required to offer standard terms and conditions for connection, which will be subject to review and approval by ERO. Where a customer disputes a connection charge as calculated by the System Operator, they will be able to appeal to ERO.

UOS charges

Other costs, including those of MO, will be recovered through UOS charges. Under the Methodology, ERO proposes to adopt performance-based rates regulation for transmission and distribution charges in the form of a price-cap. Costs, including projected efficiency gains, will be forecast for a three-year price control period. Licensees will be permitted to retain any additional profits resulting from a reduction in their costs below forecast levels until the end of the price control period. This will provide incentives for licensees to cut costs, which in turn will benefit customers by allowing prices to be reduced to match the new lower cost levels at the next price review. The concept of a price-cap is illustrated in Figure 3.3. below.

Figure 3.3 Price caps (performance-based rates) illustrated



Between price reviews, the maximum revenues that licensees are allowed to earn from regulated tariffs will be adjusted annually according to the following formula:

$REV_t = MAR_{t-1} * (1 + CPIt - X) * [(1 - PCAP) + PCAP * (VOL_t / VOL_{t-1})] + LOS_t + K_t$

Where:

REV_t	Allowed revenues recovered from regulated tariffs in year *t*
MAR_t	Maximum allowed revenues, before loss allowance and correction adjustment. Determined by ERO for period 0 prior to start of each price control. Thereafter, calculated in accordance with formula.
CPI_t	Consumer price index (inflation) or similar price index
X	Real adjustment factor. Determined by ERO
$PCAP$	Share of variable costs in total costs (or price-cap component). Determined by ERO. For the TSO, PCAP is set at 0
VOL_t	Volumes transported
LOS_t	Loss allowance (see below). Determined by ERO
K_t	Correction factor for under or over-recovery of fixed component of allowed revenues in previous year

In essence, this states that:

- The maximum allowed revenues in the current year (t), are calculated as the maximum allowed revenues prior to allowing for losses and corrections in the previous year multiplied by a measure of cost increases (the inflation index) less a real adjustment (the X-factor).
- For the distribution licensee, allowed revenues are also adjusted by volume growth in proportion to the share of variable costs in total costs, as determined by ERO (so, for example, if variable costs are considered to comprise 50% of total costs and volumes transported grow by 10%, then allowed revenues would be increased by 5%). For the transmission licensee, all costs are assumed to be fixed and therefore maximum allowed revenues do not vary with volumes transported.
- To the resulting calculated allowed revenues are added an allowance for losses (see below) and a correction factor (the K-factor), which compensates for any over or under-recovery of allowed revenues in the preceding year resulting from differences between forecast and actual volumes transported. This leaves the income of the licensee unaffected by volumes actually transported, for that proportion of their costs (and revenues) considered to be fixed.

When setting a price control, ERO will determine a starting value for allowed revenues and an X-factor such that the present value of forecast allowed revenues (in real terms) earned by licensees over the price control period will match that of the efficient cost level determined by ERO.
Licensees will, on an annual basis, submit their proposed regulated UOS charges for the coming year to ERO for its review and approval. When doing so, licensees will need to demonstrate that:

- The expected revenues earned from the proposed tariffs conform with the maximum allowed by ERO.
- The proposed tariffs are cost-reflective and, in particular, that:
    - The structure of tariffs broadly corresponds to the relative long-run marginal cost of supply to each customer type at each voltage level.
    - The basis of charges reflects the major drivers of the licensee's costs. For the transmission and distribution networks, it is the need to meet peak demand that largely drives system requirements and, therefore, UOS charges to recover the costs of the networks themselves should, where possible, be based on the contribution of each user to peak demand. Charges recovering the costs of system and market operation can be based on energy volumes, as a proxy for the relative use of these services made by system users.

ERO also expects that costs related to network provision will only be recovered from demand customers, rather than from generators. Applying deep connection charges means that generators see the full costs of their decisions as to where to locate on the network, irrespective of any UOS charges they may be liable for. There is, therefore, no efficiency gain from requiring generators to pay UOS charges and no saving to final customers (who would have to ultimately pay these costs irrespective of which entity they are allocated to). Consequently, it is simpler to allocate these solely to demand.

Incentive mechanisms
The allowed revenues will include two mechanisms designed to strengthen incentives on the transmission and DS operators to maximise their efficiency and minimise costs to customers. The first of these relates to losses. The actual costs of technical and commercial losses (the difference between energy entering and leaving the network) will be paid by the respective system operators to suppliers. To recover these costs, system operators will receive an allowance for the costs of losses, which they will be permitted to recover from regulated tariffs and/or through a contribution from the government budget. Differences between the allowed loss level and actual losses will be borne by the system operators – giving them a strong incentive to reduce losses below the allowed level set by ERO.
The second mechanism involves the sharing of the costs of actions by TSO to balance supply and demand through the use of the balancing mechanism and reserve contracts (as described in the Market Rules). Where these costs exceed the projected level, part of the difference (up to a cap) will be borne by the System Operator. Similarly, the System Operator will retain part of any savings resulting from a reduction in these costs below forecast levels.

Regulated retail tariffs
Retail or final tariffs charged by the public supplier to non-eligible customers will comprise the sum of power purchase costs, regulated transmission and distribution charges and an allowance for the costs of the public supplier itself, including an allowed profit margin compensating it for the risks it bears. The allowed costs and profit margin will be regulated under a three-year price-cap, similar to that applying to the Transmission and Distribution System Operators.
The public supplier will propose regulated tariffs on an annual basis. These will pass through regulated power purchase costs, balancing costs and network charges. Balancing costs will be subject to an incentive mechanism with the public supplier bearing a share of any costs in excess of the level allowed by ERO and receiving a share of any reduction in costs below this level, subject to caps on the maximum amount that can be paid or earned from this mechanism.
In proposing regulated tariffs, the public supplier will be required to ensure that these are cost-reflective and, so far as possible, pass-through the same structure and charging bases incorporated in regulated wholesale market and network charges.

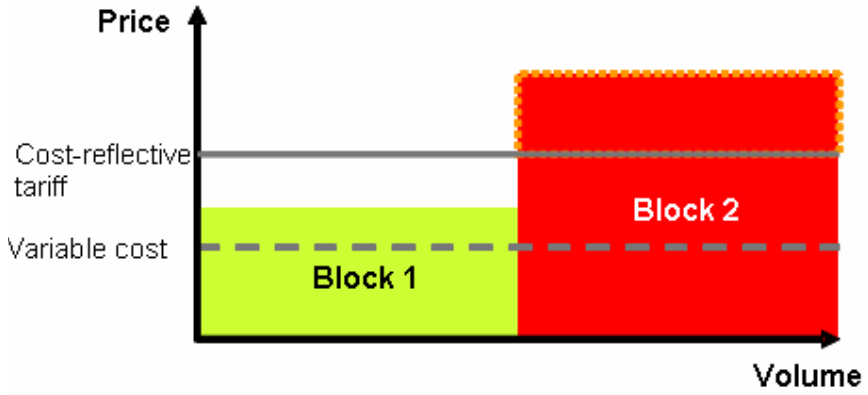
Meeting social needs

In regulating tariffs, ERO is having regard to the need of strengthening social and economic cohesion throughout Kosovo. The Tariff Methodology reflects this in two ways:

- Regulated tariffs for each customer category will be uniform throughout Kosovo.
- The public supplier is expected to offer a rising block tariff for household customers, under which those households with consumption within the first block will receive a lower tariff, with the difference being paid for by higher tariffs charged for customers with consumption above this level.

The rising block concept is illustrated in Figure 3.4. In accordance with the governing legislation, cross-subsidies would only exist within the household customer category rather than between different customer categories.

Figure 3.4 Rising blocks illustrated



CHAPTER 4 SECONDARY LEGISLATION – CONSUMER PROTECTION

4.1 SECONDARY LEGISLATION

In accordance to Article 15.1 of Law 2004/9 "on Energy Regulator", ERO is responsible for the establishment and enforcement of a regulatory framework for the energy sector in Kosovo, ensuring non-discrimination, effective competition, and efficient functioning of the energy market.
During 2005, ERO has achieved major accomplishments in completing the regulatory framework by developing, issuing and adopting under Public Consultation Procedures, several acts of secondary legislation in the form of Rules, Decrees, Acts, Instructions, Guidelines and Decisions.
All Rules of ERO are prepared in consultation with different stakeholders, Ministries, energy companies, donors and in close cooperation with the consultants funded by USAID and EAR.
Rules in form of draft are published on ERO official web site and all stakeholders are informed about such publication at least 2 to 3 weeks prior to public hearing. For the purpose of enabling different stakeholders to provide written comments ERO has created an e-mail address. After setting a deadline for commenting on drafts, ERO announces a date and agenda for public hearing and invites stakeholders to attend.
ERO gathers for a few weeks the received comments and on the public hearing ERO Board Member (or designated staff member of ERO) presents the draft and reads all comments that were received prior or during the public hearing, explains reasons why certain comments are accepted or not and gives opportunity to the public to comment further. Board votes on the draft and decides with majority of votes. Final version of the adopted Rule is then published on the web site of ERO and stakeholders are accordingly informed.

Rules issued by ERO

a) Code of Conduct and Ethics

The Code of Conduct and Ethics of ERO sets forth the guiding ethical principles and rules of conduct that govern the staff and Board Members of ERO. The Code in the form of draft was published on ERO official web site on 10. 12. 2005. A public hearing was held on 17.11.2005 and it was adopted by the Board of ERO on15.12.2005.

b) Statute of ERO

The Statute of ERO determines the internal structure, organisation, representation, authority, decision-making process, order of activity, the procedure for employing staff, as well as the responsibilities of the staff members in ERO. The Statute in the form of draft was published on ERO official web site on 10.12.2005. A public hearing was held on 17.11.2005 and it was adopted by the Board of ERO on15.12.2005.

c) Rule on Principles of Calculation of Tariffs in the Electricity Sector (Pricing Rule)

This Rule determines the principles for calculating and approving regulated tariffs in the electricity sector in Kosovo, and the procedures for submission, review, modification, approval and supervision of regulated tariffs by energy enterprises. This Rule in the form of draft was published on ERO official web site on 27.09. 2005. A public hearing was held on 17.11.2005 and it was adopted by the Board of ERO on15.12.2005.

d) Tariff Methodology in the Electricity Sector

The methodology covers both the determination of the total allowed revenues that can be earned from regulated tariffs and the principles governing the structure of tariffs used to recover these revenues. It will be the responsibility of licensees to propose regulated tariffs for review and approval by ERO that are consistent with the allowed revenues determined by ERO. The process for review and approval of regulated tariffs is set out in the Rule on Principles of Calculation of Tariffs in the Electricity Sector (the "Pricing Rule") as above. This Rule in the form of draft was published on ERO official web site on 25.10. 2005. A public hearing was held on 17.11.2005 and it was adopted by the Board of ERO on15.12.2005.

e) Rule on Dispute Settlement Procedures

This Rule establishes procedures for resolving disputes in energy sector, including complaints:

- by customers against licensees concerning the service provided;
- by licensees against other licensees related to the performance of the licensed activity;
- regarding TPA to the transmission or distribution electricity or natural gas networks and cross border transmission of electricity or natural gas.

This Rule has set forth the basic procedure applicable to customer complaints and the obligations of a Licensee in relation to customer complaints, resolution of customer complaints by ERO, alternative dispute resolution, and monitoring the Dispute Settlement Procedures in the energy sector.

This Rule in the form of draft was published on ERO official web site on 05.12. 2005. A public hearing was held on 14.12.2005 and it was adopted by the Board of ERO on17.01.2006.

f) Rule on Schedule of Fees

This Rule specifies the categories and the amount of the fees stipulated in Articles 23 and 24 of the Law on the Energy Regulator for the purposes of financing ERO, as well as the procedures and the deadlines for payment and the consequences of non payment of such fees**.** This Rule in the form of draft was published on ERO official web site on 05.12.2005. A public hearing was held on 14.12.2005 and it was adopted by the Board of ERO on 17.01.2006.

g) Rule on Licensing of Energy Activities in Kosovo

This Rule creates a public, transparent and non-discriminatory licensing procedure that promotes the establishment of a competitive energy market operation and stimulates investment while ensuring security and stability of the energy sector in Kosovo. ERO has developed application for the License and nine different generic forms of Licenses have been developed by ERO in the Electricity Sector and DH sector namely:

- Generation License for Electricity
- Generation License for Heat
- Transmission License
- Market Operation License
- Distribution License for Electricity
- Distribution License for Heat
- Supply/Trade License for Electricity
- Public Supply License for Electricity
- Public Supply License for Heat

Although the Law on Energy Regulator provides for licenses for natural gas as well, natural gas is not subject to the Rule on Licensing since the Law on Natural gas is still not promulgated. ERO envisaged soon preparation of such law and a relevant Rule on Licensing for Natural Gas will then be adopted as separate secondary legislation.

The Rule on Licensing has envisaged that the energy enterprises in electricity and heat shall apply for the licenses until 24 June 2006 and ERO will issue their licenses within 90 days from the day of application.

The application form for a license is also developed and published on the official web site of ERO.

h) Rule on Disconnection and Reconnection of Customers

This Rule sets the criteria, terms, conditions, by which energy enterprises may disconnect and reconnect customers in energy sector in Kosovo and establishes the applicable standards, principles and procedures. This Rule in the form of draft was published on ERO official web site on 27.01. 2006. A public hearing was held on 14.02.2006 and it was adopted by the Board of ERO on 24.02.2006.

i) Rule on General Terms and Conditions for Energy Supply
The general aim of this Rule is to set forth the obligations and responsibilities of supplier and customer as well as network operators in energy sector. It prescribes the supply agreement, connection to the network, metering, billing and payment of energy. This Rule in the form of draft was published on ERO official web site on 24.02. 2006. A public hearing of this Rule is envisaged for 27 April 2006 and adoption in the middle of May 2006.

j) Rule on Authorisation Procedure for Construction of New Generation Capacities
This rule is dealing with the construction of new generation capacities and/or comprehensive refurbishment of old capacity. It prescribes the application, criteria, eligibility, evaluation and other important elements of the authorisation procedure, which enables applicant to apply for a permit for construction of new and/or refurbishment. This Rule in the form of draft was published on ERO official web site on 24.02.2006. A public hearing of this Rule was held on 14.03.2006 and adoption by the end of May 2006. Because of high importance of this Rule a longer period of discussions, meetings and cooperation with all stakeholders is required.

k) Rule on Public Register
This Rule sets forth the procedures for keeping the public register of issued licenses, certificates of eligibility and certificate of renewable energy sources. This Rule is finalised and will be subject to adoption by the Board of ERO in May 2006.

l) Rule on Confidentiality of Information
This Rule is dealing with different kind of data and information that should be considered as confidential and cannot be disclosed to the public. A draft is prepared and will be subject to the public hearing immediately after adoption of the Rule on Authorisation.

m) Rule on Administrative Measures and Fines
This Rule is based on Article 57 of the Law on Energy Regulator, and sets forth the fines and administrative measures that ERO may issue to the energy enterprises. A draft is prepared and will be subject to the public hearing immediately after the adoption of the Rule on Authorisation Procedure for Construction of New Generation Capacities.

Other Decisions and Instructions issued by ERO in 2005:

Decision D_01_2005 approving the Criteria of determining and calculating unauthorised use of electricity
Decision D_02_2005 on approving the Request of KEK regarding the Disconnection Procedure
Decision D_03_2005 on Connection Procedures and Prices
Decision D_04_2005 on approval of Heating Tariffs for DHC "Gjakova" for 2005-2006
Decision D_05_2005 on Approval of Heating Tariffs for DHC "Termokos", for season 2005-2006
Decision D_06_2005 on Approval of Heating Tariffs for PMU Standard/DHU "Termomit", for season 2005-2006
Decision D_07_2005 on Approval of Heating Tariffs for DHC "Zvečan" for 2005-2006
Decision D_08_2005 on Approval of KEK Request regarding "ABC Policy"
Temporary Instruction I_01_2005 on Regulatory Reporting of District Heating Enterprises
Temporary Instruction I_02_2005 on the Principles of Calculation of Tariffs and Prices in the District Heating Sector for the Heating Season 2005/2006

4.2 CUSTOMER PROTECTION

Customer Protection Department (CPD) of ERO is responsible to ensure the application of legislation on customer protection in energy sector of Kosovo. CPD was fully established on March 2005, and has been involved in tasks related to customer protection:

- Participation in drafting and commenting the secondary legislation related to customers.
- Analysing the data's received from KEK, focused on customers' complaints.

- Participation on reviewing KEK procedures on: Disconnection, Debt Settlement, Dispute Settlement, Charges, Fines etc, to ensure that the proposed procedures are non-discriminatory and all customers are treated equally.
- Coordination of activities with Customer Protection Office of MTI on incentives for establishment of Customer Association; two meetings were held on this issue.
- Analysing and reviewing KEK loading scheme policy so called ABC Policy.
- Participation on activities of Joint UNMIK (SRSG) - PISG (PM) on ***"Electricity Supply, Billing and Revenue Collection"***. The Joint Task Force is responsible for the supervision of coordinated implementation of the institutional support to improve the normalisation of the relationships between KEK and electricity customers in Kosovo resulting in (i) the signing of appropriate supply contracts, (ii) the settlement of (a) debt and of (b) the recovery of revenue for unauthorised past consumption of electricity, and (iii) the regular payment for the current and future consumption. Measures taken by Joined Task Force on 2005:
  - Prepared the comprehensive task list of actions to be taken and responsibilities assigned for each action, within the limits of applicable law;
  - Organised the public discussions/awareness campaign in some of the municipalities of Kosovo.
  - Media customer awareness campaign on payment of electricity bills.
- Preparing the forms related to customer complaints to CPD of ERO, and Register of Customers Complaints in CPD.

CPD of ERO has prepared the first **Kosovo Energy Code of Rights and Obligations** of which around 300 copies were distributed to the customers of KEK.

CHAPTER 5 PROSPECTIVE DEVELOPMENTS IN POWER GENERATION

5.1 BACKGROUND

Generation Investment Study (GIS) is funded by EU and prepared by Pricewaterhouse Coopers LLP & Atkins International. Main objective of this study is to assist the European Community, International Founding Institutions and donor bodies in identifying an indicative priority list of investments in power generation and related electricity infrastructure from a regional perspective. It identifies Kosovo as one of the most attractive sites for the development of least-cost base load generation. The Government of Kosovo (MEM) issued the "*Energy Strategy of Kosovo"***,** according to which the available indigenous lignite should provide opportunities for the development and operation of new TPPs and furthermore, the IPPs are encouraged to invest in the power sector supplying the domestic electricity market, while allowing them for bulk electricity exports to the regional market. This was followed by a flurry of studies aiming to identify the basis for the development of new Power Generation, namely:

- "M*ain Mining Plan Sibovc*"
  The Sibovc geological resources are estimated at as high as 990 million ton over an area of 19.7 km^2. Study anticipates that 140 million ton exploitable lignite will be utilised by existing power plants (KEK), whereas other exploitable 690 million ton will be utilised by new private power producer. Reserves left to private producer are sufficient for generating 15 TWh/year for 40 years, with the assumed costs of €6.84/ton up to €8.69/ton, assuming WACC of 10% up to 15%. Based on lignite costs, price of electricity is considered to be €35/MWh up to €42/MWh (with assumed WACC 12% - 15%) depending on technology and rate of return of an investor.

- *"Economic and technical Feasibility Study of the Rehabilitation of Units of Kosovo A"*

- *"Pre-feasibility studies for new lignite fired power plant and for pollution mitigation measures at Kosovo B power plant"*

Structure of future power supply generation
The power generation in the near future 2006–2015 will be focused on meeting demand of domestic consumers with stable, uninterrupted and competing prices as well as export of energy surpluses to regional and wider market. For this reason the following is needed:

- Normal operation of Kosovo B TPP and the HPP Gazivode/Ujman;
- Rehabilitation of Kosovo A TPP (based on conclusions of feasibility study);
- Start of operation of new TPP units with installed capacity of around 1,000 MW through strategic partners, especially with joined investments;
- Construction of HPP Zhur with a concession, based on a feasibility study;
- Stimulation of construction of small HPPs by private investors.

5.2 PRE-FEASIBILITY STUDIES ON REFURBISHMENT OF TPP KOSOVO A

Project description and objectives
The aim of the Project was to provide advice concerning the power supply for Kosovo in the mid-term, provide analysis and draw conclusions concerning the key question relating to the Kosovo A TPP. Taking into account the technical assessment, the Project carried out an economic cost-benefit evaluation, with sensitivity analysis on variable parameters, and calculated the internal rate of return and other representative economic criteria for each scenario.

Technical Evaluation
Table 5.1 gives the results and orientations, which are described in the report. Based on technical criteria, a Capital Rehabilitation (CR) is not recommended for A1, because it is a very old unit (43 years) with limited available capacity and without reheat. Because of its relatively good availability

(compared to other units of Kosovo A), a Major Overhaul should be performed in order to keep A1 in operation until 2012, end of its lifetime. CR of units A3, A4 and A5 units is advisable. But since KEK had decided to urgently repair unit A3, this modifies the perspective to apply any Capital Rehabilitation to unit A3 in the near future. The Project already suggested a Major Overhaul, but nevertheless, the adequate decision should be in accordance with an economic re-evaluation, considering the new current status of the unit. At present A5 is operating at the average net capacity of 110 MW and is a valuable asset for operation. Therefore the suggested CR cannot take place before the completion of the CR of unit A4. Without any possibility to be quickly re-assigned to operation, unit A4 is the first unit recommended for CR. The CR costs are similar for units A4 and A5, with an estimated investment of €60m, while Major Overhaul for A3 should cost €24m.

Table 5.1 Results of the feasibility task on Rehabilitation of units of TPP "Kosovo A"

		A1	A3	A4	A5
Actual	Design	Very old	Old	Old	Old
	Residual life time	1/2 years	1/2 years	1/2 years	2/3 years
	Efficiency	Very low	low	low	low
	Availability	15%	0%	0%	63%
	Capacity	30 MW	0	0	130 MW
	Safety	Low	Low	Low	Low
Technical improvement	Boiler	MO	MO	CR	CR
	Turbine	MO	MO	CR	CR
	C&I	NPM	MO	CR	CR
	BOP	MO	MO	CR	CR
	Electrical	NPM	MO	CR	CR
	Cool.towers	MO	MO	CR	CR
New performance	Residual life time	7 years	12 years	17 years	20 years
	Efficiency	Low	Low	high	high
	Availability h/y	4,700	5,500	6,600	6,600
	Gross capacity	42	125	165	171
	Net capacity MW	35	110	150	155
	Coal t/MWh net	2.1	1.9	1.7	1.7
	Safety	acceptable	acceptable	Good	Good
Cost x 1,000€	Boiler	5,050	13,165	37,352	37,352
	Turbo-gen.	1,365	2,050	6,875	7,125
	Electr.equip.	900	1,000	3,800	3,500
	C&I	500	4,700	4,700	4,700
	BOP & cond.	885	1,970	6,050	6,050
	Cool.towers	750	1,500	1,500	1,500
	Common Auxiliaries	-	-	5,700	-
TOTAL		**9,450**	**24,385**	**65,977**	**60,227**
Consultant's recommendations		MO ASAP FS 2010/12	MO 2005 MO 2009/10 FS 2015/20	CR 2007/08 MO 2012 MO 2017	CR 2008/09 MO 2013 MO 2018
Specific Rehabilitation cost €/kW		225	195	400	352
IRR>25%	A4			High	
IRR=15%-25%	A4+A5			Medium	
IRR=5%-15%	(A4+A5) + A3		A3 acceptable in case of HGS & MGS		
IRR: Internal Rate of Return					
MO: Major Overhaul - CR: Capital Rehabilitation - FS: Final Shut down					

Economic evaluation

The internal rate of return (IRR) is always higher than 10% in the medium growth demand scenario with two units rehabilitated whatever the power import cost until 2020. With only one rehabilitated unit the IRR is more than 10% in any cases and raises to more than 20% in the high growth demand scenario. CR of three units is attractive from economic viewpoint if the growth demand is high (more than 6%) and if power import cost stays high. The best economic results are obtained with CR of A4 and A5.

Important remark

Additional cost estimate for opening a new mine ranges between 125 and €175m according to KTA, but the mining expansion was not in the scope of this study; consequently this price was not included in the rehabilitation cost. As mentioned in Chapter 1, annual lignite production in 2005 was 5.7 million ton, for generating 3.4 TWh from Kosovo A1, A5 and Kosovo B. If more than three units are to be supplied simultaneously coal demand will increase from 7.5 million ton in 2007 up to 10.3 million ton in 2009, whereas with current level of lignite production mines in operation will be completely depleted in 2012, with reduced output from 2009 onwards.

Recommendations
The Project suggested rehabilitation decision criteria as follows: "If specific estimated rehabilitation cost is lower than half the specific cost of new equivalent power unit and also lower than equivalent imported energy the rehabilitation plan is fully justified, and strongly recommended". The result of the study leads to €65.9m for CR of unit A4 and €60.2m for CR of unit A5. The difference between the units is due to the necessity to add an extra cost of €5.7m for the rehabilitation of auxiliaries common to all units, which must be performed for the rehabilitation of the first unit. Considering that CR will be applied first to unit A4, the estimated specific rehabilitation cost will be €400/kW (gross capacity 165 MW with a cost of €60.2m plus €5.7m); for the second CR (unit A5) the specific rehabilitation cost will be only €352 /kW. It is around one third of the cost of a new equivalent unit, considering their average specific cost, according to the international market: €1,100/kW for this capacity range.

5.3 NEW GENERATION FACILITY POWER PLANT KOSOVO C

Pre-feasibility study for new lignite-fired power plant and for pollution mitigation measures at Kosovo B power plant
A pre-feasibility study was undertaken on the basis that a new TPP is developed together with a new mine based on the Sibovc lignite field. It has been assumed that a foreign investor or investor group will have a leading role in the mine and power plant development as the Kosovo financial resources as scare.

Sibovc lignite
The Sibovc field contains some 840 million tons of lignite, from the total some of 200 million tons of that is planned to be reserved for the supply of the existing power plants of Kosovo A and B. That mine will be a continuation of Bardhi in the south western corner of the new field. A feasibility study on the mine development was conducted in 2004 by Vattenfall. It concluded that the cost of lignite fuel available from the new mine is one of the lowest ones in whole Europe making power generation on the Kosovar lignite very attractive. The remaining lignite resource of approximately 650 million tons would make it possible to build a 2,000 MW power plant. The mine could furnish the plant at its full load for its whole lifetime of 40 years. It has been assumed that the investor will develop its mining operations independently of the KEK mine.

Pre-feasibility calculations – cost of new power plant
The pre-feasibility study concludes that the variable cost of new power plant in Kosovo would be in a range of €10-12/MWh. This compares well with the system marginal prices of the SEE market estimated in the REBIS GIS report, where even the lowest system marginal prices are around €17/ MWh in case of low demand growth and ample rainfall. This illustrates the high competitiveness of the lignite deposits in Kosovo. In other cases of the REBIS GIS study, the estimated system marginal prices, which could also be interpreted as absolute minimum open market prices, remain well over €20/MWh. The current recorded market prices are €40/MWh and over.

Thermal power plant design features
The study has analysed two alternative unit capacities namely 300 and 500 MW. It is assumed that the new plant will be able to operate at its full load i.e. base load at all market conditions. The Project has assumed that the plant will be built in two phases i.e. 900-1,000 MW in the first phase (3 x 300 MW or 2 x 500 MW), the first units running by 2012-2014 and the second phase (4 x 300 MW, alternatively 2 x 600 MW or 2 x 500 MW) would start when the first phase has demonstrated its ability to generate power and sell it to the market. The whole 2,000 MW could be completed by 2018-2020.

Power plant site and power block general arrangements
Large scale lignite utilisation has to take place close to the mine as it has low calorific value per weight and results in high transportation cost. A so called "mine mouth plant" with belt conveyors will be used for its haulage up to the plant. Additionally a site for correctly dumping ash from the operation has to be found. The 650 million tons of lignite will gradually be converted into 600 TWh

electricity and 100 million tons of ash over 40 years of operation. Three potential sites around the Sibovc field, has been analysed in detail: Kosovo B, Bivolak and the valley north of Grabovc on the western side of the field. All those sites are within 3 kilometres from the field and can be used. The Project recommends Kosovo B site, provided that sufficient assurances can be given to the foreign investor that he will not be liable for any existing contamination of the site. The 15 million ton ash pile aside the Kosovo B plant has to be removed to make space for the new reserve lignite yard at the site. The cost of removal has been estimated at €52m. The site in Grabovc would offer a less visible site and in the future shorter transportation distance of lignite, as it is assumed that following lignite mines after Sibovc will be in the south.

Power plant concept and applied technology

The new plant will apply the latest well proven steam power plant technology available for lignite firing. Its pollution control methods will be as the current EU rules call for. For combustion of the lignite in 300 MW units the modern Circulated Fluidised Bed (CFB) technology can be used. As the fuel contains limestone, desulphurisation takes place during the actual combustion process in the boiler and very low sulphurdioxide (SO2) emissions can be expected. In the case of 500 MW units more conventional pulverised firing (PF) is used and there a separate de-sulphurisation plant is required to meet the same emission limit. Additional investigation is recommended to identify the most economical method for de-sulphurisation. The pulverised firing concept is also calculated for the 300 MW plant for comparison purposes. Both combustion processes can meet the given nitrogen oxide (NOx) emissions. The plant cleans its flue gases from dust in the electrostatic precipitators. Thereafter the flue gases are planned to be taken into the large cooling tower and mixed with the exiting water vapour of the tower i.e. the highly visible stack is eliminated. The plant is estimated to have an overall efficiency of 40 %. In the case of applying CFB combustion technology for the 300 MW plant, its efficiency will be 1-1.5 percentage points less as sub critical steam parameters would be used. There are no proven references for supercritical parameters with CFB-boilers. The exact efficiency figures will depend on the final plant design, taking into consideration also the possible impact of the Kyoto protocol for Kosovo and the plant investor. The plant itself is estimated to employ directly 200-300 persons in the first phase operation and the second phase would basically double that number. Additionally the plant will use a lot of external services for its maintenance. The mining operation for the plant will employ more than 1,000 persons.

Economic and financial performance

The new TPP is estimated to cost €1.1-1.3 billion in the first phase plus the development cost of the mine estimated at €300m. The second phase is approximately 10 % less expensive. Building two 300 MW units into one 600 MW plant in the second phase saves an additional 15%. The plant operating cost by using €4/ton direct lignite mining expenditure is estimated and presented in Table 5.2.

Table 5.2 Operating cost of the Plant

Plant type & size	Operating cost excl. capital €/MWh	
300 MW CFB	**10,26**	
500 MW PF	**10,46**	
300 MW PF	**10,72**	
The financial evaluation assumed the following input data:		
Interest on cash assets	**10,0**	%
Energy market price	**40**	EUR/MWh
Tax rate	**20,0 %**	Corporate tax in Kosovo
Depreciation	**5**	% annually
Amortisation period	**9,5**	Years
Rest value	**20%**	of total investment
Inflation	**4**	%
Debt/Equity Ratio	**70/30**	
Return on equity	**20**	% (required minimum)
Interest on debt	**10,0**	%
Lignite Fee	**3,00**	EUR/MWh
Dividends	**max ROE**	(from retained earnings)

The power plant would be profitable at the assumed market price using any of the technical options. The CFB plant and the large PF plant are largely equal in NPV calculations, with more advantage to the large PF plant. Debt repayment within 10 years from the start of construction of each unit is feasible. A sensitivity analysis indicates that the plant would be very profitable using any of the technical options if the electricity sales price goes up to €60/MWh, and makes a loss (after financing costs, also all technical options) if the price is at €20/MWh. Regarding the economic benefits of the new power plant to the Kosovar economy, the construction of the new mine and power plant will bring approximately €60m of foreign money every year over the ten year development time. When the fully built 2,000 MW plant is in operation, its turnover is around €600 million (€40/MWh sales price and 15 TWh/annum). One quarter, i.e. 25 % of that revenue, is estimated to benefit directly to the Kosovar economy as presented in Table 5.3.

Table 5.3 Direct benefits to the Kosovar economy from a 2,000 MW plant in operation during one quarter

Revenue item	Estimated value €m/annum
Salaries, mine & plant	25
Maintenance services	25
Ash & water fees	10
TSO electricity transfer fee	30
Lignite fee	48
Land lease	2
Corporate tax	10
Grand total for Kosovo:	**150**

It has also to be noted that the plant revenue is mostly from the export sales, i.e. fresh new funds into the Kosovar economy. That fee is proposed to be the selection criteria for the foreign investor. The highest bid (€ per ton) should win. In this estimate it was assumed to be €3 per ton.

Recommendation
One of the most urgent actions is to get the Sibovc mine development moving, although the foreign investor should decide itself where and how to do it. The time required to vacate the land for construction and develop the mine up to the point where lignite is delivered to the power plant is longer than the time for the power generation. Resettlement of the area for the mine development around the Sibovc village should be started immediately. The depositing of ashes from the power generation needs a permanent and environmentally sound solution.

5.4 PERSPECTIVES OF HPP "ZHUR" - PRIZREN

Kosovo power system is extremely dominated by TPPs. It would be highly desirable, especially considering the thermal character of Kosovo power system building hydro power plant Zhur. Only one hydro power plant, Zhur HPP, has been chosen as a candidate power plant for construction within this long-term power system expansion plan for Kosovo. Two different versions of construction were subject to analysis. The first version (Zhur 1 HPP) was conceived as a two power plant project: Zhur I and Zhur II. The basic step is Zhur HPP I with a rated power of 246 MW, and a maximum gross cost of approximately €576m.

5.5 SMALL POWER PLANTS

The building of the small hydro scale hydro power plants, wind energy, geothermal, solar, biomass, and gas from processing of urban and rural waste should also be a perspective. In the channels of irrigation providers “Iber Lepenci” and “Radoniqi”, have been identified as locations where it is possible to build small hydro plants. The pre-feasibility study gives an answer on possibilities of building a hydro plant chain on the river Lumbardhi i Pejes. The priority in this sector is the creation of an appropriate legislative framework and favourable market for promotion of development of renewable sources in Kosovo. The goal is to create a friendly environment for private investments in this sector. For development of small scale hydro power plants the cadastre of water and hydro power plants should be drafted.

CHAPTER 6 REGIONAL DEVELOPMENTS AND INSTITUTIONAL RELATIONS

6.1 INTRODUCTION OF ATHENS PROCESS – ECSEE TREATY

The creation of the Energy Community in SEE is the outcome of the so-called "Athens Process" for regional energy co-operation. This process was launched by the EC, with the support of the Stability Pact in 2002. Thanks to the dedication of all the parties involved it made rapid progress including the signing of MoU on Electricity in November 2002 in Athens and the expansion of this co-operation to the gas sector through a second MoU in December 2003. Under these, the SEE countries committed themselves to introducing common rules based on EU legislation "acquis communnautaire" in these two sectors. The process received a significant boost through the physical reconnection of the SEE grids to the UCTE network in October 2004.
The SEE countries efforts are being supported by a well coordinated group of donors led by the EC and including the WB, the EBRD, IEA, EIB, USAID, CIDA (Canada), Austria, Italy, France, Germany, the Czech Republic and Greece. The Stability Pact's role has been to complement the European Commission's lead by generating political support for the process among the SEE governments and the international community as well as promoting the process to the business community.
The draft treaty was initialled on 22 March 2005 by country delegates in Brussels.

Signing of ECSEE Treaty
On 25th October 2005 the first ever multilateral treaty in SEE was signed in Athens. Signing the Energy Community Treaty, the European Union and nine partners of SEE (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the former Yugoslav Republic of Macedonia, Romania, Serbia and Montenegro and the UNMIK on behalf of Kosovo, and Moldova has Observer Status) will create the legal framework for an integrated energy market. Negotiations with Turkey are ongoing for joining the treaty at later stage. EC President Jose Manuel Barroso hailed the Treaty as "a major achievement for peace and stability in Europe". Commissioners Andris Piebalgs in charge of energy, who signed the treaty on behalf of EU, commented that "the Energy Community Treaty will enhance security of supply and give support to a strategically vital sector".

What will be the results of this Treaty?
The Treaty aims to create a single stable regulatory framework for the trading of energy across borders through ensuring that the SEE countries adopt the EU's *acquis communitaire* in areas such as energy, environment and competition. The economic impact of this will be to create a larger, liquid and predictable energy market that is attractive for investors. A modern market provides a level playing field for all participants and increases the reliability and security of the energy systems. It will also encourage the development of the market for gas, which is under developed in the region and provide greater opportunities for the skilled labour force in the region. The preparatory work including identification of rehabilitation and investment projects should facilitate investments from both the public and private sector as the industry is restructured and opportunities to build and operate new power plants or manage distribution companies emerge. The WB has already put in place a US$1 billion "fast track" loan to assist investments throughout the region. The political significance of this treaty should not be underestimated. The SEE countries have formalised their commitment to regional co-operation in the energy sector including providing mutual assistance, with this internationally binding treaty. Implementation will result in the countries of SEE becoming part of the EU's internal market in a key economic sector before their accession to the EU. Many have compared this Treaty to the 1951 European Coal and Steel Community Treaty that paved the way for the European Community.

Investment Needs
A recent study undertaken by the EC and the WB estimates that **€12.5 billion** will be required in the next 15 years, to rehabilitate existing power plants and construct new ones and this is on top of the €8.5 billion required for investments in transmission and distribution.

The objectives of the Treaty

- to create a single stable regulatory and market framework throughout Europe; this should enhance the attractiveness of SEE for investments in the energy sector;
- to enhance security of supply;
- to improve the environment situation; and
- to develop competition on a broader geographic scale and to exploit economies of scale.

More practically the activities of the Energy Community will include:

- Implementation of the EU "acquis communautaire";
- Creation of a single mechanism for the cross-border transmission and/or operation of energy markets; and
- Creation of an energy market without internal frontiers.

The Energy Community Treaty defines according to Title V the following institutions:

- Ministerial Council (MC);
- The Permanent High Level Group (PHLG);
- The Regulatory Board
- The Fora; "Athens Forum" for electricity and "Istanbul Forum" for gas
- The Secretariat (ECS)

ERO's participation in SEEREM meetings and fora:
To develop the activities of ECSEE Treaty, CEER has established the South East Europe Energy Regulation Working Group (SEEER WG) under which were established Task Forces and ERO has appointed staff members on each Task Force under this WG.

SEEER WG Meetings - ERO Participation:
10th SEEER WG Meeting (Rome, February 4, 2005);
11th SEEER WG Meeting (Sofia, May 20, 2005);
12th SEEER WG Meeting (Skopje, June 09, 2005);
13th SEEER WG Meeting (Belgrade, November 23, 2005);

ERO staff, was involved on commenting documents and in expressing the requests for active membership of Kosovo in SETSO Task Force. Following the 11th SEEER WG where ERO representatives presented a letter signed by SRSG, ETSO Steering Committee and EC have agreed to allow ERO to attend the SETSO Task Force representing the TS of Kosovo under UNMIK administration.

ERO participated in the Regional Fora, the two Energy Weeks (Skopje, 6 – 10 June, 2005 / (Belgrade, November 24 – 25, 2005) and the first SEE "mini-Forum" (Athens, October 6 – 7, 2005).

ERO also participated in:
1st Meeting of Energy Community Regulatory Board (ECRB – Athens February 2005); and
1st ECSEE gas Regulatory Group Meeting (Zagreb, Croatia, September 30, 2005)

6.2 INSTITUTIONAL RELATIONS

During year 2005 ERO strengthened and improved the relations with both internal institutions of energy sector, (UNMIK, PISG, etc), and external regional bodies and Associations.

Assembly of Kosovo
The Assembly of Kosovo has delayed for more than one year the appointment of two Board Members of ERO (they have been finally appointed in February 2006). ERO has submitted the ERO's Annual Report to the Assembly in May 2005. ERO staff was involved in working groups of Assembly for development of primary legislation (Law on District Heating).

UNMIK/EU Pillar IV
Head of ERO was regularly attending meetings hosted by EU pillar IV, expressing the concerns and advocating the necessity for a strong and independent regulator. ERO's monthly reports were sent to DSRSG, EU Pillar IV, KTA etc.
All reports received from Pillar IV were completed by ERO staff and sent back without any delays.
DSRSG Mr. Joachim Ruecker, has visited premises and staff of ERO on 17th of March 2005. He has been informed of ERO's activities and the issues of energy sector in Kosovo.

UNMIK/KTA
KTA has responsibility for management of energy enterprises of Kosovo (KEK and District heating companies). ERO together with other stakeholders were actively participating on processes related to the incorporation of energy enterprises and tendering processes for electricity import.

Ministry of Mining and Energy (MEM)
Regular meetings, consultations, workshops, and seminars were held together with key staff of MEM and with Minister Mr. E'them Ceku. The main tackled issues were:

- Energy Strategy of Kosovo (approved by Assembly of Kosovo)
- Electricity Market Model and Establishment of ITSMO
- Draft Law on Energy Efficiency
- Investments strategy, priorities
- Power balance
- Renewable energy
- Support to KEK on their Recovery plan strategy

Donors
Donors are EAR, WB, USAID, KfW, BMZ, Sida,and Foreign Investors. ERO was direct beneficiary of TA projects from EAR, USAID, Sida, and KfW. ERO staff has participated on steering committees of WB projects ESTAP II and ESTAP III. ERO has made several presentations on current situation of energy sector and legal framework of Kosovo, aiming to aware the donors and Foreign Investors on needs and priorities of investments in energy sector.

KEK
ERO held regular meetings with KEK/ESBI and key staff. The issues discussed in such meetings were: Energy Supply Policy; Compliance of Procedures developed by KEK with applicable regulations; Power Balance; Revenue Protection Strategy of KEK; Quality Standards; Winter Electricity Strategy; Disconnection Policy; ABC Policy, and Customer Complaints.
KEK staff was invited to participate on all workshops and seminars organised by consultants of TA projects to ERO related to electricity sector.

District Heating Companies
ERO held regular meetings with management and key staff of DH companies. They main focus of these meetings was Law on District Heating and tariff issues.

In ERRA's General Assembly Meeting held on April 13, 2005 in Budapest Hungary ERO became Associate Member of ERRA. To date ERRA lists 23 Full and 5 Associate Members. The Association was legally registered in Hungary in April 2001 and its Secretariat operates in Budapest. The Association's main objective is to increase exchange of information and experience among its members and to expand access to energy regulatory experience around the world.
As associate member of ERRA, ERO has actively participated in ERRA's activities in 2005:

- Prepared and sent information/files to ERRA
- Appointed the members in all ERRA's committees and Working Groups
- Participated on following Meetings/Conferences/Trainings organised by ERRA/NARUC:
  a) Energy Regulation & Investment Conference of Energy Regulators (April11-12th, Budapest, Hungary)
  b) ERRA Annual Conference (April 13-14th, Budapest, Hungary)
  c) 3rd International Training Program on Energy Regulatory Practices; ERRA – joint with Central European University (CEU) (July 16-23, Budapest, Hungary)

d) Licensing/Competition Committee meeting (September 5-6, St. Petersburg, Russia)
e) Tariff/Pricing Committee meeting (September 22-23rd, Yerevan, Armenia)
f) Legal Regulation Working Group Meeting (October 24-25, Kiev, Ukraine)
g) Regulatory Participation and Communication Workshop (October 26-27, Kiev, Ukraine)
h) Pilot E- Learning Course on Energy Regulation (October 24 – December 5)

CHAPTER 7 REVIEW OF OTHER ERO ACTIVITIES

7.1 ERO'S MAIN ACTIVITIES IN 2005

- Preparation of Secondary Legislation (rules) as defined by the Laws of Energy Sector
- Preparation of Model of Future Electricity Market, Market Rules, Tariff methodology
- Participation on activities related to Energy Strategy of Kosovo
- Participation on investment studies for new investments, and for rehabilitation of existing TPPs of Kosovo
- Participation on process for incorporation of KEK and DH companies
- Participation for establishment of Independent Transmission System and Market Operator ITSMO (WB & EAR support Projects)
- Participation on activities to support KEK on their Revenue Strategy
- Participation on activities for energy efficiency and renewable energy
- Participation on activities of ECSEE Treaty
- Participation on activities of ERRA

7.2 VISITS AND CONFERENCES

In addition to participation on activities organised under ECSEE treaty and ERRA, ERO staff has attended the following conferences/meetings/workshops/seminars/trainings:

- **EBRD South East Europe Regional Seminar** (Tirana Albania, Feb 10-11th, 2005); European Bank for Regional Development EBDR organised the seminar for participants of SEE; Market monitoring analyst of ERO participated on this seminar.
- **ETSO Workshop on the Security of Supply in the Liberalised Energy Market** (Brussels, Belgium March 15th, 2005); Two Board Members of ERO has participated on this workshop.
- **Open Seminar in Regional Markets for Renewable Energy** (Lisbon, Portugal, March 17-18th 2005); Head of L&L Department – Board Member of ERO was ERO participant on this Seminar.
- **Hands-on Training within Albanian Energy Regulatory Authority (ERE)** (Tirana, Albania May 12-13th, 2005); Staff of CPD and Tariff Structure Analyst of ERO had two days hands-on training in ERE of Albania.
- **International Conference: Role of Co-generation in SEE** (Thessaloniki, Greece May 12-13th, 2005); DH exert of ERO participated on this conference organised by Hellenic Association for Co-generation of Heat & Power (HACHP)
- **Meeting: KEK, KTA, ERO – EPS (Serbia)** (Skopje, May 26th 2005); discussed the CBT and ancillary services between KEK and EPS.
- **SC meeting of Feasibility Study for Interconnection 400 kV line Kosovo – Albania** (Tirana Albania, 31st August – 1st September); Power System Expert – Board Member of ERO represented ERO on SC meeting of WB project.
- **Conference on Financing New Generation investments in SEE** (Sofia, Bulgaria, Sep. 14-15th 2005); Head of ERO participated in this conference.
- **Meeting with Ministry of Economy and Energy of Bulgaria** (Sofia, Bulgaria, Sep. 14th 2005); Head of ERO together with Minister of MEM and DSRSG had a meeting with Ministry of Economy and Energy of Bulgaria.
- **5th Balkan Power Conference** (Sofia, Sep. 14-16th 2005)**;** Power Plant Expert – Board member of ERO was present on this conference.
- **Training in Sustainable Energy and Clean Coal** (USA, Nov. 4-26th); Market Monitoring Analyst of ERO participated as ERO representative in this training financed by US Office in Prishtina.

- **IEE Energy Trading Conference** (London, Nov. 21-22nd); Head of ERO and Head of Legal and Licensing Department – Member of the Board were presented at this conference
- **Visit by Energy Regulatory Authority (ERE) of Albania** (Prishtina, Dec. 19-20th); ERO hosted the visit by ERE of Albania, main objective of visit was to strengthen the regional co-operation and to share the experiences of regulatory issues; a delegation of 6 staff members of ERE chaired by the Head of office had a joint meeting with ERO, with KEK/ESBI, visited TPP Kosovo B, and had a meeting with MEM.

CHAPTER 8 DISTRICT HEATING

8.1 BRIEF DESCRIPTION OF DISTRICT HEATING SECTOR IN KOSOVO

District Heating Sector in Kosovo is limited to four small municipal-owned utilities that cover the municipalities of Prishtina, Gjakova, Mitrovica and Zvečan. District heating in Kosovo is exclusively used for space heating and does not include supply of hot tap water. Consequently the market share of the district heating in relation to the estimated heat demand in Kosovo is very small, thus supplying some 5% of the total heat demand. District heating systems in Prishtina and Gjakova are respectively operated by the vertically integrated companies Termokos and DH Gjakova. Termokos and DH Gjakova, are POEs, with assets under custody (trust) of KTA. Recently the incorporation Project was completed for Termokos and DH Gjakova, by which these two companies are transformed in Joint Stock Companies. The District heating system of Mitrovica is operated by Termomit, which is a "Working Unit" of the integrated municipal utility company Standard. Similarly, the district heating system in Zvečan is operated by integrated municipal utility and housing company "Zvečan".

Heat production

Heat production is carried out at the central heating plants equipped with fuel oil fired boilers – using mostly heavy oil (mazut) and light oil (diesel D2) at a smaller scale.

Termokos heat generation facilities consists of the main boiler plant with installed supply capacity 116 MW – two heavy oil (mazut) fired boilers with 58 MW capacity each, and installed reserve capacity – one heavy oil boiler of 29 MW capacity; and of two light fuel oil boilers at the hospital with total capacity of 14 MW (each boiler has 7 MW).

DH Gjakova heat generation plant has two heavy fuel fired boilers with a capacity of 20 MW and 18.6 MW, which gives the total installed capacity of 38.6 MW.

Termomit heat generation facilities consist of heat plant "Lisic Polje" equipped with only one operational heavy fuel oil fired boiler with nominal capacity of 9.3 MW, and by the heat plant at hospital that possesses three operational very small heavy fuel boilers with a total capacity of 7.6 MW.

Heat generation in Zvečan is carried out by the heat plant equipped with two light oil fired boilers with a capacity of 800 kW each.

Distribution network

Distribution network covers the parts of the towns with higher density of population / blocks of buildings. Distribution network consist of primary network up to the delivery point in the substation and the secondary network from the delivery point in the substation.

Termokos district heating distribution network has about 28 km primary pipeline trench length. The distribution network is over designed meaning that its distribution capacity is approximately 300 MW. Integral part of the distribution network is the pump & heat exchanger station located in the sunny hill and the 243 substations that are the split point between primary network and secondary network.

DH Gjakova distribution network comprises 12 km pipeline trench in total, of which 4 km is a newly constructed pipeline trench in year 2001, and about 62 substations as part of the network that divides primary and secondary network. Heat meters are installed in 42 substations.

Termomit distribution network consists of two separate parts. Main part of the network is connected to the heat plant "Lisic Polje", while the other one is connected to the heat plant at the hospital premises. Total length of pipeline trench is about 4.5 km.

Next Table gives a summary of the technical characteristics of the district heating systems, heat generation and supply data.

Table 8.1 Technical characteristics of District Heating Systems

Company (Town)	Installed Capacity	Distribution Network		Heat Generation [MWh / year]				Heat delivered to customer			
		Trench Length [km]	No. Substa-tions	2001 /02	2002 /03	2003 /04	2004 /05	2001 /02	2002 /03	2003 /04	2004/ 05
TERMOKOS (Prishtina)	2 x 58 = 116 1 x 29 = 29 2 x 7 = 14	28.5	243	83,174	71,585	96,790	102,932	62,380	53,689	72,593	97,467
Subtotal	**159**	**28.5**	**243**	**83,174**	**71,585**	**96,790**	**102,932**	**62,380**	**53,689**	**72,593**	**97,467**
DHC Gjakova	1 x 20.0 = 20.0 1 x 18.6 = 18.6	12	62	16,530	17,901	18,274	16,289	13,224	14,321	14,619	13,053
Subtotal	**38.6**	**12**	**62**	**16,530**	**17,901**	**18,274**	**16,289**	**13,224**	**14,321**	**14,619**	**13,053**
TERMOMIT (Mitrovica)	1 x 9.3 = 9.3 2 x 3.3 = 6.6 1 x 1.0 = 1.0	4.5	20	NA	NA	NA	NA	NA	NA	NA	NA
Subtotal	**16.9**	**4.5**	**20**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
DH Zvečan	2 x 0.8 = 1.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Subtotal	**1.6**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

NA: Not Available

Customer Related Issues

Service supply

Actual supply service area covered by Termokos, for both residential, and commercial & public customer groups, is about 1,035,000 m^2 respectively having 617,000 m^2 and 418,000 m^2. It supplies some 12,100 costumers in total – 11,540 households, and 560 commercial & public customers.

Total estimated service supply area of DH Gjakova is 134,000 m^2. The share between residential, and commercial & public customer groups is approximately in the proportion of 45 – 55 % respectively.

Termomit service supply area covers both households, and commercial & public customer groups. Due to the bad condition of the network and secondary systems, household customers are not supplied during last season. The service supply area for commercial & institutional customer group is estimated at some 27,100 m^2.

Supply area of Zvečan includes only commercial & institutional customer group and is estimated at about 8,900 m^2.

Billing and Payment Collection

Due to the lack of implementation of heat metering, billing is performed in relation to the heating space of each customer. There has been noted difficulties related to invoicing in terms of non-achievement of planned invoicing due to deduction of non-heating days caused by the breaks in the system (heat plant, network), still high water leakage rate (heating season 2004/2005 ended up with about 250m^3/day) and an unreliable customer data base.

An average collection rate for the heating season 2004/2005 is estimated at the level of about 35 % due to a set of various factors. Some of them are directly linked to the DH enterprise such as generation and supply performance, customer service, and billing & collection inefficiency. Other factors are linked to the overall economic and income situation of the population, such as affordability and willingness to pay, lack of housing administration, and uncertain legal measures in handling non-paying customers.

Table 8.2 Collection Rate DH companies in Kosovo for DH season 2004/2005

Heating Season 2004/2005	Heating Space	Tariff [€ / m2]	Billing [€]	Collection [€]	Collection rate %
Termokos Prishtina					
Household	616,441	0.85	2,031,392	286,743	**14.12**
Commercial & Public	418,695	1.1	1,869,380	1,199,212	**64.15**
Total	**1,035,136**		3,900,772	1,485,955	**38.1**
DHC - Gjakova					
Household	53,911	0.82	241,063	51,289	**21.28**
Commercial & Public	57,367	1.25	413,085	152,410	**36.9**
Total	**111,278**		654,148	203,699	**31.14**
Termomit - Mitrovica					
Household	0				
Commercial & Public	27,100	1.2	NA	NA	NA

NA: Not available

8.2 LEGAL & REGULATORY FRAMEWORK FOR DISTRICT HEATING PRICE REVIEW

In accordance to the primary legislation – Article 46, 47, 48 of the law on Energy Regulator, ERO is responsible for establishing the tariff methodology, and approving the tariffs in the regulated energy sector. Therein is a set of broad principles calling for reasonable, justifiable, and non-discriminatory principles under which the energy enterprises should recover all justified costs including reasonable return on their investments.

The district heating sector in Kosovo in transmission and distribution of heat is classified as natural monopoly, while no competition exists for the time being in heat production. Therefore the district heating tariffs are subject to approval by ERO.

In line with its legal obligations and powers ERO has conducted a district heating price review for the heating season 2005/2006. In order to have a meaningful price review process and to follow the basic principle that utility tariffs must be cost reflective, ERO has pre-adopted the approach focused on realistic assessment of the financial and technical information provided by the District Heating Enterprises.

ERO timely began its preparation for the price review by drafting and issuing two instructions:

- Temporary Instruction I_01_2005 on Regulatory Reporting of District Heating Enterprises, issued on 30th of June 2005, in which are determined procedures for submission of the regulatory reports, and the content of the regulatory reporting for DH season 2004-2005.
- Temporary Instruction I_02_2005 on Principles of Calculation of Tariffs and Prices in the District Heating Sector in Kosovo for the Heating Season 2005/2006, issued on 10th of August 2005, in which are determined procedures for submission and approval of tariffs, and sets the methodology for calculation of tariffs.

Contents of the Instructions

Instruction I_01_2005 on Regulatory Reporting contains detailed description of the content of the information to be submitted within regulatory reporting regarding DH season 2004-2005, and the deadlines for submission. It also contains the detailed guidelines for completion of the regulatory statements. Accompanying annexes of the Instruction – Annex 1: Regulatory Statements; and Annex 2: Timetable periodical Review of District Heating Enterprises.

In the Instruction I_02_2005, are stated in detail procedures for submission and approval of tariffs for DH season 2005-2006, and the tariff methodology applied. In addition, Instruction I_02_2005 also

contained: Annex 1 – calculation of the Rate of Return (RoR) on RAB; and Annex 2 – Details for calculation of Tariff.

Tariff methodology

For the purpose of the formulation/calculation of tariffs and prices the Rate of Return (RoR) methodology (or so called cost plus) was applied. The RoR methodology defines the allowed cost that has to be recovered and the reasonable profit to be earned by the DHE, which is calculated by an allowed Rate of Return on RAB.

8.3 PRICE REVIEW FOR DISTRICT HEATING SEASON 2005-2006

In order to achieve satisfactory progress of the price review, ERO has introduced the price review process by organising the information meeting and other forms of interaction with DH enterprises and other relevant sector stakeholders in order to explain and clarify the Instructions and the main aspects of the price review process.

District heating price review for the season 2005 /2006 has included entire Kosovo DH sector – DHE Termokos, Prishtina; DHE Gjakova, PMU Standard / DHU Termomit, and DHU of PMU Zvečan. In accordance to the procedures stipulated in the above mentioned Instructions price review process started by DH enterprises submitting to ERO regulatory reports and the tariff application package. It must be mentioned that although the regulatory reporting and applications were more complete than previous years, ERO has again faced difficulties such as: delays in submission, unreliability and incompleteness of requested information, data, and supporting documents.

The process of tariff setting and approval was performed in two steps:

1. Determination of allowed revenues, based on: i) forecasted information and data provided in tariff application; ii) information provided in regulatory reporting, i.e. financial, technical and customer data that has actually taken place in the heating season 2004/2005; iii) reconciliation of the current tariff and the projected one, which was based on the difference between projected and actual revenues of the previous heating season.
2. Calculation of the tariff based on the determined allowed revenues and the tariff proposal, which was subject to final approval by ERO.

ERO issued the determined allowed revenues for each DH enterprise, which was accompanied by a comprehensive detailed regulatory report as Annex to determination of allowed revenues. The regulatory report contained the following main parts:

- Principles and Formulation of the RoR Tariff Methodology, where are specifically presented the basic principles of the methodology, formulation consisting of schematic calculation of allowed revenues, as well as giving the basic regulation formulas.
- Determination of allowed revenues has mainly included the following:
    1. Evaluation and determination of allowed operational costs which has contained the analytical explanation and justification for determination of allowed value for every cost group and for almost main items constituting particular group of costs.
    2. Evaluation and determination of the depreciation.
    3. Determination of Allowed Return on RAB, which includes:
        i) establishment of the RAB; and
        ii) calculation of WACC and allowed Profit.
    4. Reconciliation of the current tariff, based on the difference between the projected and actual revenues of the previous heating season.

Determination of allowed revenues was the basis for final tariff calculation and the submission of tariff proposal by DH enterprises to ERO for final approval.

Consequently to the above described process, ERO has concluded the price review by issuing respective decisions on approving tariff rates for each DH enterprise – namely:

1. Decision D_04_ 2005 issued on 15/11/2005 on approval of tariff rates for DHE Gjakova;

2. Decision D_05_2005 issued 17/11/2005 on approval of tariff rates for DHE Termokos;
3. Decision D_06_2005 issued on 30/11/2005 on approval of tariff rates for PMU Standard / DHU Termomit, Mitrovica; and
4. Decision D_07_2005 issued on 05/12/2005 on approval of tariff rates for PMU Zvečan.

Below is presented the sample table of tariff rates included in the respective decision for TERMOKOS.

Table 8.3

TARIFF RATES FOR DISTRICT HEATING COMPANY "TERMOKOS" FOR HEATING SEASON 2005/2006

Table A. TARIFF FOR NON-METERED CUSTOMERS

DISTRICT HEATING COMPANY "TERMOKOS"		
Components of Tariffs	**Residential**	**Commercial & Institutional**
Heat capacity contracted (fixed component)	€ 0.17 / m2 per month	€ 0.20 / m2 per month
Heat delivered (variable component)	€ 0.63 / m2 per month	€ 0.76 / m2 per month

Table B. TARIFF FOR METERED CUSTOMERS

DISTRICT HEATING COMPANY "TERMOKOS"	
Monthly tariff of heat capacity (fixed component)	€ 1.55 / kW
Tariff of heat delivered (variable component)	€ 36.07 / MWh

Below is presented a summary table of the district heating tariff for the four DHC in Kosovo.

Table 8.4 Summary table Tariffs for metered and non-metered customers – DH season 2005-2006 for the four DHC in Kosovo

A. TARIFFS FOR NON-METERED CUSTOMERS

DH COMPANIES	Components of Tariffs	Residential per m2 per month	Comm.& Inst. per m2 per month
TERMOKOS	Heat Capacity Contracted (fixed comp.)	€ 0,17	€ 0,20
	Heat Delivered (variable comp.)	€ 0,63	€ 0,76
DH GJAKOVA	Heat Capacity Contracted (fixed comp.)	€ 0,23	€ 0,30
	Heat Delivered (variable comp.)	€ 0,62	€ 0,96
TERMOMIT	Heat Capacity Contracted (fixed comp.)	NA	€ 0,25
	Heat Delivered (variable comp.)	NA	€ 1,05
ZVECAN	Heat Capacity Contracted (fixed comp.)	NA	€ 0,10
	Heat Delivered (variable comp.)	NA	€ 1,13

B. TARIFFS FOR METERED CUSTOMERS

DH COMPANIES	Components of Tariffs	Per Metered Unit
TERMOKOS	Heat Capacity Contracted (fixed comp.)	€ 1.55 / kW
	Heat Delivered (variable comp.)	€ 36.07 / MWh
DH GJAKOVA	Heat Capacity Contracted (fixed comp.)	€ 2.42 / kW
	Heat Delivered (variable comp.)	€ 45.97 / MWh
TERMOMIT	Heat Capacity Contracted (fixed comp.)	NA
	Heat Delivered (variable comp.)	NA
ZVECAN	Heat Capacity Contracted (fixed comp.)	NA
	Heat Delivered (variable comp.)	NA

It must be mentioned that several main issues were subject to discussion and debate with DHC:

- Subsidy for the mazut: ERO has taken the approach that subsidy has to be deducted from the real cost of the company.
- High forecasted purchasing price of the mazut proposed by DHC was questionable for ERO, taking into account the lower market price of the heavy fuel oil (mazut).
- Determination of a justified RAB, due to unreliable accounting information about book value, the revaluation of assets, and assets acquired by grants.

8.4 FOLLOW UP OF THE IMPLEMENTATION OF THE DISTRICT HEATING TARIFFS FOR THE DH SEASON 2005-2006

Conclusion of the price review for the DH season 2005/2006 was immediately followed by ERO by sending to all stakeholders a letter regarding "Feedback on ERO's Price Review for the District Heating Season 2005-2006 for DHC Termokos and DHC Gjakova and suggested improvements". In the letter are stated all difficulties that ERO faced during the price review and suggested measures for improvements. For the purpose of coordination of efforts and measures to be taken in the future, ERO organised a meeting to discuss the above letter with official representatives of MEM and KTA. The participants agreed to undertake the necessary future actions and measures within the respective scope of their organisations.

ERO further closely monitors the implementation of the tariffs, by regularly contacting and meeting DHC. This interaction with DHC includes request of the feedback on how the billing is performed, collection of customers' payment, impact of the tariffs on collection, and number of customers invoiced with "normative tariff" and with "energy consumption tariff".

ERO continuously encourages DHC to switch from “normative tariff” to “energy consumption tariff” as much as possible emphasising several facts: “energy consumption tariff” based on the real measured consumption is in favour of incentivising customers to save energy according to their needs; fairness in billing – i.e. the customer is charged for the energy that has been really consumed – which may increase the collection rate; and finally the implementation of the “energy consumption tariff” will be a legal requirement according to the Law on District Heating, which will be soon promulgated.

CHAPTER 9 FINANCIAL STATEMENT 2005 – BUSINESS PLAN - PROJECTS DOCUMENT

9.1 FINANCIAL STATEMENT 2005

Since its establishment in June 2004, ERO received financing from KCB, EU Pillar within UNMIK, and from Donors Organisations to enable its operational set up. During 2005 ERO has not generated any income from license fees. It is expected to receive revenues from licensees from September 2006 onwards, which will allow ERO to really act as a financially independent regulatory body. The financial aspects of the operations of ERO for 2005 are therefore still presented with a Statement of Sources and Application of Funds as mentioned in Table 9.1.

Table 9.1: Statement of Sources and Application of Funds (in €)

ENERGY REGULATORY OFFICE OF KOSOVO	Full Year 2005	
	Budget	*Actual*
SOURCES OF FUNDS		
License and permit fees	-	-
Kosovo Consolidated Budget (KCB)	**273,000**	**215,428**
UNMIK (EU Pillar)	**NA**	**240,956**
Donor organisations		
EU PILLAR	55,000	64,500
EAR	800,000	733,333
SIDA	158,463	188,171
USAID	-	175,000
Total Donor organisations	**1,013,463**	**1,161,004**
TOTAL SOURCES OF FUNDS	**1,286,463**	**1,617,388**
APPLICATION OF FUNDS		
Staff costs		
UNMIK (EU Pillar)	NA	121,468
Kosovo Consolidated Budget	89,445	44,890
Total staff costs	**89,445**	**166,358**
Goods and Services		
UNMIK (EU Pillar)	NA	119,488
Kosovo Consolidated Budget	153,555	142,545
Donor organisations	-	-
Total Goods and Services	**153,555**	**262,033**
Technical Assistance from Donors		
EU Pillar	55,000	64,500
EAR	800,000	733,333
SIDA	158,463	188,171
USAID	-	175,000
Total Technical Assistance	**1,013,463**	**1,161,004**
Capital Expenditures		
Kosovo Consolidated Budget	30,000	27,993
Total Capital Expenditures	**30,000**	**27,993**
TOTAL APPLICATIONS OF FUNDS	**1,286,463**	**1,617,388**

NA: Not available

The total actual cost to operate ERO in 2005 amounted to €1,617,388 and was spent as following:

	Amount	As percentage of total costs
Staff costs *(excluding 2 internationals)*	€166,358	10%
Total goods and services:	€262,033	16%
Technical Assistance:	€1,161,004	72%
Total capital Expenditures:	€27,993	2%

ERO was financed during 2005 by KCB, EU Pillar within UNMIK and by Donors Organisations, as below explained in detail.

a. Kosovo Consolidated Budget

During 2005 ERO spent €215,428 Actual versus a KCB allowed Budget of €273,000 of which the break down is as following:

	KCB Budget	Actual
• Salaries and Wages	€89,445	€44,890
• Goods and Services including utilities expenses	€153,555	€142,545
• Capital Expenditures	€30,000	€27,993

On request by the Fiscal Council Office in November 2005, an amount of €30,099 was transferred from RRO to the ERO to enable the discharge towards the consultancy company Enviros (beneficiary Energy Office). Therefore ERO's budget was increased by €30,099 to €303,099 to enable ERO to disburse this amount to Enviros.

The major part of unspent items from the 2005 KCB Budget was from the category Salaries and Wages because of the delay in nomination of two (2) Board Members by the Assembly of Kosovo (in February 2006 instead of August 2005); and the non-acceptance by KCB of the coefficient increase for the staff as included in KCB Budget. Furthermore at the end of 2005 ERO had 13 KCB staff, while the Budget provided for 15 KCB staff. The capital expenditures were used to purchase two new ERO cars.

b. UNMIK EU Pillar Budget

EU Pillar did not provide ERO with a budget for 2005. Staff costs and Goods and Services spent by ERO from EU Pillar Budget in 2005 is €240,956. ERO employed 8 local EU staff at the end of 2005 and the total salary cost was €121,468. The cost of the two international EU staff is financed by the central budget of EU Pillar IV and is not included in ERO actual costs of 2005. The actual cost of Goods and Services for 2005 amounted to €119,488 and consists of Business Travel: €27,520; Security Guarding Services: €16,149; Office Rent: €57,701; Fixed Phone charges: €7,838; Mobile Phone charges: €2,239; and Utilities: €8,041.

c. Budget from Donors Organisations

TA from Donors in 2005 amounted to €1,161,004, of which €64,500 was funded by EU Pillar, €733,333 by EAR, €188,171 by SIDA and €175,000 by USAID. Consultancy Services funded by EU Pillar lasted from January to May 2005 at the actual cost of €64,500 compared to a budget of €55,000, and consisted of work on draft Rule on Dispute Settlement Procedures, General conditions of Energy Supply, Schedule of Fees, and key elements of Tariff Methodology.

TA project from EAR relates to the "Institutional Building Support to the Energy Regulatory Office of Kosovo", which started at the beginning of 2005 and for which €733,333 is allocated in 2005 while €266,667 is allocated in 2006.

The SIDA Project was finished in November 2005 and the actual cost for 2005 was €188,171 compared to a budget of €158,463. The reason of the increase of €29,708 Actual versus Budget was because a part of the unused funds in 2004 was brought forward to 2005; and because of the use of the contingency to finance a study tour for ERO Managers regarding District Heating in Mälmo, Sweden, at the beginning of November 2005.

In September 2005 a consultancy contract funded by USAID started for rendering consultancy services to ERO, which will last 10 months. The total contract amounts to $700,000 (€583,333) of which €175,000 is allocated to 2005 and €408,333 to 2006.

ERO staffing

At the end of 2005 ERO had 24 staff members: 13 KCB, 10 EU Pillar of whom 2 Internationals and 1 seconded staff member funded by USAID. There are still four vacancies to be filled: Head of Administration (EU Pillar) and three KCB staff: one Serbian translator, one cleaner/maintenance and one economist. With respect to the staffing and effective functioning, ERO is fully compliant and functional. The Commitment Officer, Approving Officer, Certifying Officer, Authorising Officer and Certified Procurement Officer are selected from the staff members of ERO. Only Authorising Officer is an international staff member (Head of ERO) and the other positions are filled by national staff members. All staff members performing activities mentioned above are trained and have already shown their abilities to perform such assignments.

Sustainability

It is expected that from September 2006 ERO will receive fees from issuing licenses to the energy enterprises, which is reflected in the Business Plan 2005-2009. The KCB Budget for 2006 has been reduced four times. Although ERO asked for the full year 2006 a KCB Budget of €391,468 to operate efficiently, it was reduced the first time to €273,000. It was reduced for the second time to €239,445 according to the limits of the MEF. On 18 October 2005 it was reduced for the third time to €226,463, which was below the MEF limits. In January 2006 it was surprisingly cut for the fourth time by €19,017 to increase Wages and Salaries for the Auditor General Office, by which ERO's KCB Budget for 2006 was down sized to €207,446, which is roughly half of what ERO needs. It is without saying that this huge cut in budget jeopardises the good functioning of ERO, especially as EU Pillar does not pay in 2006 for the rent of the new building and telephone bills and only pays for the other utility bills until June 2006. There is in 2006 not enough training budget available in KCB Budget for local employees and to ensure a minimum training for KCB employees, ERO is completely dependent on donor's support. The only way to come out of this crisis situation is to finance ERO's operational cost with the revenues of license fees, hopefully in September 2006, which will give financial independence to ERO.

9.2 BUSINESS PLAN

ERO Board approved on 16 January 2006 the Five year Business Plan 2005-2009, which sets out the goals, strategies and initiatives of the Energy Regulatory Office of Kosovo during the current and next four financial years. More specifically the plan outlines ERO's mission, mandate, objectives and organisation; provides an overview of the structure and development prospects in the energy sector in Kosovo; identifies the challenges that ERO faces in terms of strategic goals and factors that would impact on their achievement; specifies the projects, outputs and their indicative timing during 2006 and sets outs the strategies and initiatives for the following four financial years; defines the required resources for implementation of the projects and initiatives planned; and contains detailed financial projections for the five-year planning period. Business Plan 2005-2009, is entirely published on ERO's website.

Financing and Profit and Loss Statement 2007

The Business Plan is based on self-financing trough license fees and permit fees from September 2006 onwards in order to finance a suitable operational ERO budget and to perform its activities adequately. In Schedule 9.2 we show the Profit and Loss Statement for the year 2007, during which ERO will collect revenues from license fees for the first time during a whole entire year. Under staff expenses is the new salary scheme for all ERO staff included, which has been adopted by ERO Board on 16 January 2006 and which is also fully published on ERO website. The calculation of the annual license fees is based on €0.22 per MWh of estimated electricity sold by electricity companies and €0.1 per MWh of estimated annual turnover of heat sold by DHC. The amount of revenues from license fees for ERO will be far below the maximum amount equivalent to two percent of the gross turnover of energy enterprises, as stipulated in Article 24.7 of the Law on the Energy Regulator. ERO is a non-profit organisation and aims to have just enough revenues to cover adequately its operating costs.

Table 9.2 Profit & Loss Year 2007 as in Business Plan

Profit and Loss Statement	In Euro	As % of Revenues
Revenues (License Fees)	**1,102,582**	**100.00%**
Staff	329,824	29.90%
Goods and Services	222,847	20.20%
Technical Assistance and Training	550,000	49.90%
Depreciation	14,000	1.30%
Total Operating expenses	**1,116,671**	101.30%
Loss	**-14,089**	-1.30%

From 2007 onwards it has been assumed that TA and Training will be financed with Revenues coming from License Fees, as no donations will be provided anymore to ERO. The projected loss of €14,089 will be financed by the Profit during 2006, as the Revenues from License and Permit Fees are projected to start in September 2006.

9.3 PROJECTS DOCUMENT

According to the Law on the Energy Regulator "Projects Document" means a document produced by ERO that sets out proposed project plans for a calendar year.
Projects Document, which is currently TA from Donors, is divided below into two categories: the ongoing Projects which continue from 2005 through 2006; and the future Projects which will start in 2006.

9.3.1 ONGOING PROJECTS

EAR - INSTITUTIONAL BUILDING SUPPORT TO ERO
The purpose of this Project is to strengthen the institutional capacity of ERO on developing a sound and regulatory framework necessary to facilitate market operation within the ECSEE process. This project is covering:

- Activities for operational establishment of ERO: procedures for maintaining the Public Register assistance in defining the compulsory administrative measures and administrative fines, set up the internal accounting system, assistance to ERO in preparing the projects document and annual financial report.
- Development of Market Model and Market Rules: development of a complete framework for the implementation of Wholesale Market Model, which will be compliant with the laws of Kosovo, EU Directives and the ECSEE Treaty.
- Pricing and Price Regulation: preparation of Rule on Pricing and Tariffs, development of tariff methodologies, implementation planning and assisting ERO in Price Reviews.
- Licenses: development of data requests from licensees and assistance in issuing licenses to new businesses/energy enterprises.
- Assistance to ERO in issuing Authorisations and Permits and in establishing a system for compliance monitoring: establishing and monitoring quality regulation.
- Technical/Operational Codes: options for Codes outline of Technical Codes and regulatory review and approval of Technical Codes.
- Training: perform assessment of the training needs of ERO in order to develop a training program in accordance to ERO needs, and conduct the training.

The project scope comprises in total twenty four sub-tasks. The status of those sub-tasks as at the end of 2005 is as follows:

- Seventeen sub-tasks are completed, waiting for final approval or are expected to be completed during the coming period.
- One sub-task (training) is expected to be completed at the beginning of 2006, except the plan for study tour to Romania, scheduled for early April 2006.
- Six sub-tasks are expected to have a completion later than the original expiry date of 15 February 2006.
- During the reporting period the consultant has been able to provide capacity building and training to ERO. Interventions have included work not directly related to the specific tasks included in the Project scope, but essential for meeting ERO's current advisory needs.

Milestones: As there are delays in the implementation of the Training Programme and in Tasks 2 and 3, the Project will be extended by three months until mid May 2006.

USAID - DEVELOPMENT OF SECONDARY LEGISLATION

This Project gives TA to ERO on development of Secondary legislation and comprises the following:

- Assistance in reviewing and commenting on the draft Statute of ERO, Code of Ethics and Conduct, Rule on Disconnection and Reconnection, and Rule on Licenses.
- Final review and comments on the Rule on Dispute and General Conditions of Energy Supply.
- Preparation of the Manual of Operations and Rule on Confidentiality of Information.
- Advisory Expert support to Board members and key staff of ERO.
- Legal support in preparing the Rule on Authorisation Procedure for Construction of New Generation Capacities, and for licensing, with particular emphasis on the rehabilitation of Kosovo A generation units.

Milestones: Assistance in review and finalisation of the Rule on Authorisation, Assistance in preparing the Manual of Operations, Rule on General Conditions of Energy Supply – all drafts are finalised and waiting for public consultation process in the first quarter of 2006. Project is going well and in accordance with initial TOR. New TOR is approved to extend the Project in 2006 in line with ERO needs.

EAR - GENERATION SUPPORTED PROJECTS

- Economic and technical Feasibility Study of the Rehabilitation of Units of Kosovo Task Report, EAR, September 2005.
- Pre-feasibility studies for new lignite fired power plant and for pollution mitigation measures at Kosovo B power plant, contract nr. 04KOS01/03/09/, EAR, February, 2006.
- The EAR is funding the Project "Further Institutional Support to the Energy regulatory Office in Kosovo" 05KOS01/04/001 with specific objectives: Assistance to ERO on analysis and evaluation of investments proposals for new power plants based on Law on Energy Regulator and in reviewing/approving the Technical/Operational Codes.

9.3.2 FUTURE PROJECTS

WORLDBANK - ESTAP III

This Project is funded by WB. For one lot ERO has a monitoring role and for the second one ERO is beneficiary.

The activities related to this Project are:

- Contract 1: TSO: continuation on development of Grid Code of TSO and preparation of policy framework for the role of ITSMO.
- Contract 2: Tariff Framework: development of Transmission and Retail Tariff including the lifeline tariff. This Project will start 1st of April 2006 and will last 8 months.

EAR - FURTHER STRENGTHENING THE INSTITUTIONAL CAPACITY OF ERO

This Project will start in mid March 2006 with a duration of 18 months. The overall objectives of this Project is to strengthen the institutional capacity of ERO on implementing the rules of regulatory framework, necessary to create the basis for transparency and non-discriminatory of market operation, and to fulfil the obligations of ECSEE Treaty. The specific objectives are:

- Assistance to ERO in analysis and evaluation of investment proposals for new power plant based on the Law on Energy Regulator and reviewing/approving the Technical/Operational Codes.
- Assist ERO in price review for generation, transmission distribution, and supply of energy, according to methodologies for setting prices and tariffs issued by ERO, considering the profile of the end user where applicable (gender and ethnicity).
- Design and Specifications for the IT support system.
- Introduce the Quality Management Procedures in ERO.
- Train ERO staff on regulatory review procedures, licensees and market monitoring, energy supply analysis and monitoring, market design and monitoring, customer protection and dispute settlement, cost/price control and tariffs, and all other activities, in accordance with the individual staff's TORs (Job Descriptions).

The first kick-off meeting of this second EAR project will be held at the beginning of April 2006.

EAR - ESTABLISHMENT OF A TRANSMISSION SYSTEM AND MARKET OPERATOR

This TA Project is funded by EAR and is for the benefit of the energy sector in the context of unbundling the energy sector. The overall objective of this Project is to support the restructuring of the Kosovar energy system in line with the Athens Memorandum and the ECSEE Treaty, through the establishment and institutional development of ITSMO.

The specific objectives of this contract are:

- Assist on unbundling completion from KEK and operational start up of ITSMO.
- Assist on designing the market operation processes, operating rules and procedures.
- Provide training for the operational staff of ITSMO, ensuring gender and minority balance among the staff receiving training.

The results to be achieved in this Project are:

- Investment and Development Programme and Business Plan are prepared.
- Market operation processes and rules are prepared.
- ITSMO is operational and functional.
- Management and Operational Staff are trained, ensuring that women and minorities are represented among the trained staff.