

# The Development of Adequate Energy Infrastructure in Albania and Alternative Resource Options

Commissioner Petrit Ahmeti

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# RESTRUCTURING OF ELECTRICITY SECTOR

## Important documents on the sector reform

- |  |                |
|--|----------------|
| • Electricity Directive (EU Directive 96/92)   | 1996           |
| • Thessalonica Declaration                     | September 1999 |
| • Memorandum of Understanding of Athena (I)    | June 2000      |
| • Energy Policy Statement (Power Sector)       | April 2002     |
| • Memorandum of Understanding of Athena (II)   | November 2002  |
| • Electricity Directive (Directive 2003/54/EC) | 2003           |
| • National Strategy of Energy                  | 2003           |
| • Treaty of ECSEE                              | Draft          |

# RESTRUCTURING OF ELECTRIC ENERGY SECTOR

## Main objectives of the Electricity Reform

- Development of a competitive electricity market in order to provide a sustainable supply to the consumers based on a reasonable price and high quality, with a lowest environmental impact, with acceptable commercial market principles through regulations and laws.
- Participation on the Regional and European market.
- Encouragement of the private investors taking part through investments in electric sector which needs high financial capital.

# RESTRUCTURING OF ELECTRIC ENERGY SECTOR

## Ways to achieve objectives

- Law and Regulation Base establishment in the effective and transparent way
- Establishment and Functioning of the Electricity Regulatory Entity
- Restructuring of the electricity sector through functions unbundling of generation, transmission, distribution and supply, commercialization and corporatization.
- Clear regulations and processes for financial settlements and payments
- Private capital attracting for investments and privatization
- Participation on the Regional and European market through laws, regulations and tariffs, access grid concordance.

# UNBUNDLING OF POWER SECTOR

## Main Principle of Unbundling

### Power Sector Functions

- |                        |                                       |
|------------------------|---------------------------------------|
| 1. Generation          | (Generators)                          |
| 2. Transmission        | (Operator as single)                  |
| 3. Distribution        | (Distributors)                        |
| 4. Suppliers           | (Electricity supply to the consumers) |
| 5. Qualified Consumers |                                       |

Unbundling of the Transmission function is considered as a necessity to suspend the monopoly of transmission function which are looking to compete on the national and regional electricity market.

### Unbundling means:

- |                       |                                       |
|-----------------------|---------------------------------------|
| FUNCTIONAL Unbundling | (Independent Operator)                |
| LEGAL Unbundling      | (Corporatization)                     |
| FINANCIAL Unbundling  | (Clear division of costs and tariffs) |

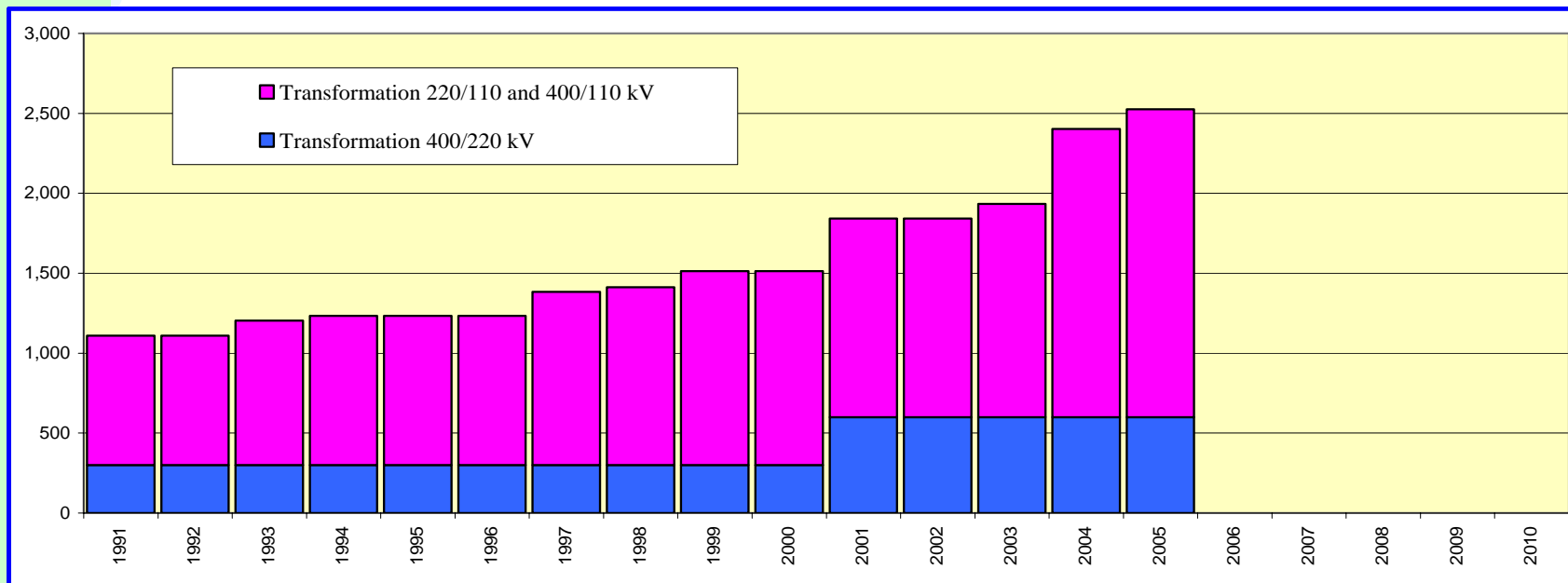
# UNBUNDLING OF THE TRANSMISSION FUNCTION

1. Definition of the physical technical borders between  
Transmission  
Generation  
Distributions;
2. Physical unbundling of assets regarding to physical  
technical borders defined.
3. Clear responsibility defined for Maintenance of Assets
4. Clear responsibility defined for Power System Operator;
5. Costs separation.

All mentioned above are carried out and functioning from  
January, 1, 2004.

From 2004, all decisions have been consolidated regarding the  
transmission functional unbundling.

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Vau Dejes	30	30	60	60	60	60	120	120	120	120	120	120	180	180	180					
Shkoder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Fierza	30	30	30	60	60	60	60	60	60	60	60	60	60	60	60					
Burreli	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120					
Tirana1	180	180	180	180	180	180	180	210	210	210	240	240	240	360	360					
Tirana1	0	0	63	63	63	63	63	63	63	63	63	63	63	63	126					
Tirana2 (400)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Tirana2 (220)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Shara	0	0	0	0	0	0	0	0	100	100	100	100	100	100	100					
Rrashbull	0	0	0	0	0	0	0	0	0	0	0	0	0	200	200					
Elbasan1	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270					
Elbasan2	300	300	300	300	300	300	300	300	300	300	600	600	600	600	600					
Zemblak	0	0	0	0	0	0	0	0	0	0	0	0	0	150	150					
Fier	180	180	180	180	180	180	270	270	270	270	270	270	300	300	360					
Babica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
220/110 kV	810	810	903	933	933	933	1,083	1,113	1,213	1,213	1,243	1,243	1,333	1,803	1,926					
400/220 kV	300	300	300	300	300	300	300	300	300	300	600	600	600	600	600					
<b>TOTAL</b>	<b>1,110</b>	<b>1,110</b>	<b>1,203</b>	<b>1,233</b>	<b>1,233</b>	<b>1,233</b>	<b>1,383</b>	<b>1,413</b>	<b>1,513</b>	<b>1,513</b>	<b>1,843</b>	<b>1,843</b>	<b>1,933</b>	<b>2,403</b>	<b>2,526</b>					



# DUTIES AND ORGANIZATION OF OST sh.a. (Transmission System Operator)

## I. Transmission Assets Management

MAINTENANCE  
PHYSICAL OPERATION  
IMPROVEMENT  
DEVELOPEMENT

## II. Transmission System Operator and Power System

## III. Power Market Operator



# TRANSMISSION FINANCIAL UNBUNDLING

1. Financial Agreement between KESH sh.a. and OST sh.a. (TSO)
2. Consolidation of OST sh.a (TSO) Assets.
3. Re-evaluation of OST sha.a (TSO) Assets.
4. Evaluations of liabilities
5. Transfer of Assets and Liabilities
6. Transfer of Responsibilities for Investments

**KESH**



Transfer of Assets  
Transfer of Liabilities  
Transfer of Responsibilities  
for Investment

**OST**

# TRANSMISSION FINANCIAL UNBUNDLING

1. Methodology approved for Transmission tariffs;  
(approved by ERE on  
Transmission Services Tariff  
Cost recovered for administration, operation, maintenance  
Cost recovered for transmission lost  
Auxiliaries Services Tariff  
Cost recovered for power-frequency regulator; to  
regulate reactive power  
Cross-Border Trade and Capacity Allocation
2. Transmission Tariff Application;
3. Tariff Transmission approval;

# **TRANSMISSION IMPERATIVE INVESTMENTS**

- 1. Mini SCADA – LFC and Telecommunication Project**
- 2. Reactive Power Compensation 100 MVar in center of in Albanian Power System**
- 3. Metering in Transmission System**
- 4. Urgent Replacement of some Primary Equipment 220/110 kV**
- 5. Reinforcement of some Substation 220/110 kV**

# Participation on Regional and European Organizations

1. Membership Application to UCTE (September 2004)

Technical Committee for Albania Issue to UCTE

2. Synchronism of Zone I Synchronic with Zone II (October 2004)

3. Participation on the Inter-Compensation mechanisms of TSO

Cross-Border Trade Mechanism  
Congestion Management  
Mechanism



