

HYDROPOWER PLANT OF GJANÇ

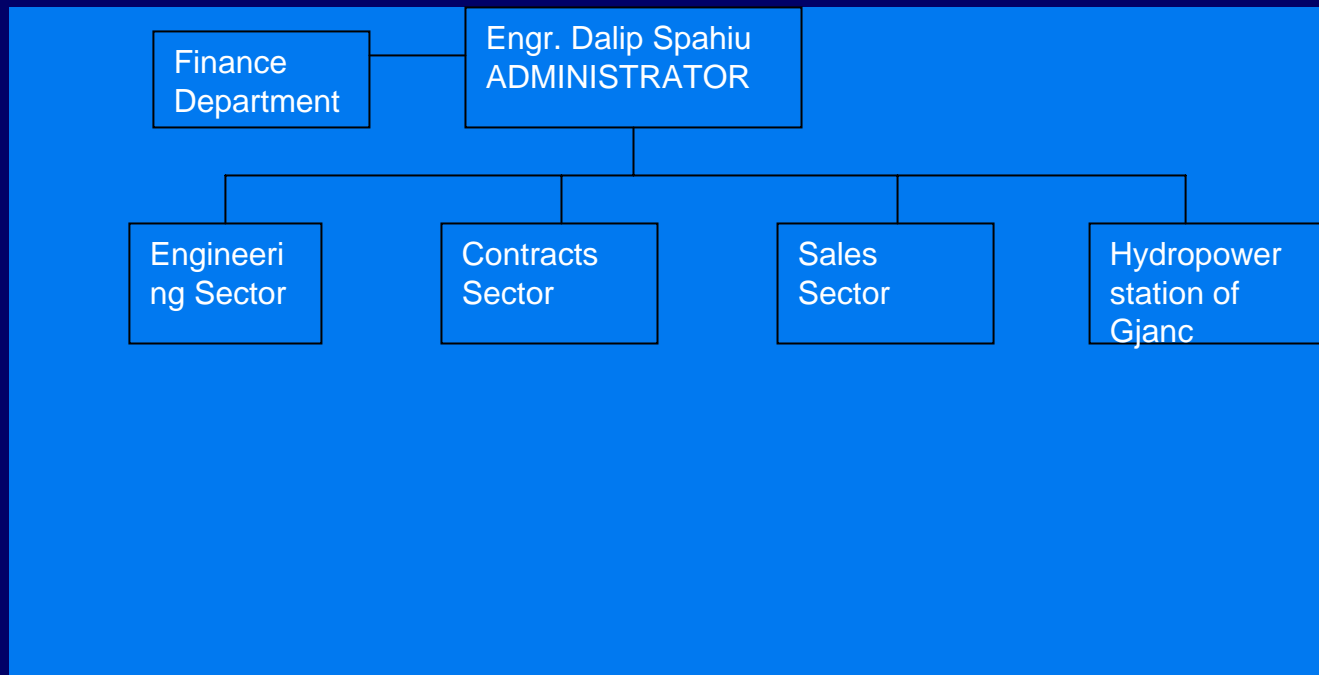
Mr. Dalip Spahiu
Administrator of Spahiu-Gjanç
sh.p.k. company



Spahiu-Gjanc company

- It is a concessionaire company exerting its activity in electricity generation using the hydropower plant of Gjanc of 3 MW capacity and it also handles electricity transmission.
 - The company's administrator Mr. Dalip Spahiu has graduated from Faculty of Mechanical Engineering in Tirana University in 1985 and his activity is focused on domain of production and administration of energy resources, especially the oil ones.
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The organizational scheme





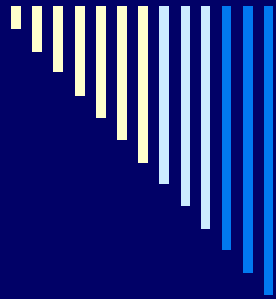
The staff

□ Electrical technicians	3
□ Mechanical technicians	3
□ Workers	3
□ Economist	1
□ Utility head	1



Concession agreement

- The government considers the privatization of the electrical power sector as a very important means of the energy policy and it confirms its high interest in privatization of the local hydropower stations and those of medium power in order to rehabilitate their depreciated public assets.
 - The government appreciates the ROT (rehabilitate, operate, transfer) concessionary formula because it enables the rehabilitation of hydropower plants with no need to touch the state budget.
 - “Spahiu-Gjanc” shpk company has a concessionary agreement with OSHA (ME, MIE and MBU) of ROT type.
 - The concessionaire has taken over a technical and economic study on the rehabilitation and use of the hydropower station, subject to concession, and it is capable to rehabilitate and manage the hydropower station of Gjanc.
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The concession agreement targets

The main targets of the aforesaid concession agreement are as follow:

- ❑ Rehabilitation of hydropower plant of Gjanc, bringing it to the installed and generating capacity not lower than the projected one.
- ❑ The optimal technical and economic operation for the electricity generation.
- ❑ Transfer of the utility in service and its rehabilitated assets to the state by the end of the timeframe of the concession agreement.



Generation

- Hydropower plant of Gjanc used to generate 9 million kWh from 1991 up to the moment it was taken by concession in 2004.
- From the time it was taken by concession to present, it has generated 10 million kWh.



Supplementary information on hydropower plant of Gjanc

- It is located 15 km away from the southern Korca. The reservoir near it supplies it with water.
- It comprises an aggregate of Francis turbine and it has a capacity of 1*3,7MVA.
- It generates 5 million KWH annually.



Main data

- 18 million cubic meters reservoir
- Gen-turbine 1
- Type of turbine Francis horizontal
- Speed 1000 rotations per minute
- Highness 625 meters
- Turbine power 2,8MVA
- Generation power 3,7MVA
- Transmission power 4MVA



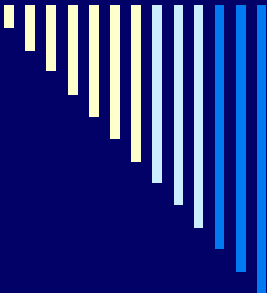
The encountered problems

- It has had technical problems that highly reduced its efficiency.
 - Return to full efficiency required application of new methods and financing that KESH could not afford.
 - Our enterprise guarantees carrying out of effective investments in this aspect.
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Rehabilitation project (2 year)

- Civil works
 - Hydro-mechanical works
 - Electrical resources
 - Supervision and control system
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Description	1st stage (in euro)	2nd stage (in euro)
Civil works	-	100, 000
hydro- mechanical works	150 000	200 000
Electrical works	120 000	150 000
Supervision and control	150 000	30 000
Training	20 000	20 000
Spare parts	30 000	30 000
In total	470 000	530 000



Program of investments

- First stage: Instrumentation of the aggregate and its ancillary parts, installation of the new speed regulator along with the voltage regulator and incentive ones.
 - Second stage: Rehabilitation of the civil part, hydro-mechanical one and main equipment of the substation as well.
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Targets

- Increase of electricity generation by installing, renewing and using advanced technology.
 - Prolongation of the lifetime of the hydro-mechanical and electrical equipment, increase of the yield and optimization of the hydropower plant use.
 - Increase of quality, safety at work and capabilities of the staff.
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Financial investment

Investments

Installed power	Investments in euro		Total investmetn
3.7 MVA	First year	Second year	1000000
	470000	530000	

Structure of generation under normal conditions of use 100 % MWh

Period	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
Amount	3200	4500	5000	5500	6000	6500	6800



Conclusion of stages of rehabilitation

- 1 000 000 euros will be invested in the Gjanc hydropower plant in the first two years after its concession was granted to Spahiu-Gjance company. The company is actually working to implement this project. It has carried out several constructing and rehabilitating works, and in the first quarter of 2005 it worked on equipment and machinery and totally renewed the commanding system by substituting it with coherent digital technology with the assistance of an Austrian company in accordance with the concession agreement.
- The best part of the investment of 1 million euros is predicted to be completed by the end of 2005.



Licensing by ERE

- "Spahiu Gjanc" shpk company has been licensed by ERE by the decision no.20 dated 19.12.2003 of ERE Leading Board
 - The license by ERE has a 30 years timeframe in compliance with the concession agreement.
 - This company's license cannot be transferred without the approval of ERE.
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- This license also envisages inclusion and responsibility of the licensee for the increase of efficiency and generation of electrical power, aiming at a low cost.
- The license forces the licensee to insure the activity, life, health and property of the persons from the damages it may cause while operating in the electricity sector.
- The licensee sends continuous information to ERE and once a year it submits to it the financial balance and technical report on the annual operation.(first quarter)



The actual generating capacity

- In the first half of this year the hydorpwoer station has generated 3037440 kWh. This level of generation is highly satisfactory if taking into account the fact that the plant went through an overhauling process over the first quarter of the year. This testifies to a use with high yeild of the installed power, water flows and working hours. The annual production plan has been met to 60.74 % level up to the end of July.



Applying for a price

- Price of electricity sale at the Albanian Power Corporation approved by ERE.
 - In 2004, it was 4,6 lek/kwh
 - Over 2005 it is 5,9 lek/Kwh
 - Application of price for 2006 is being examined by ERE's Tariff Department.
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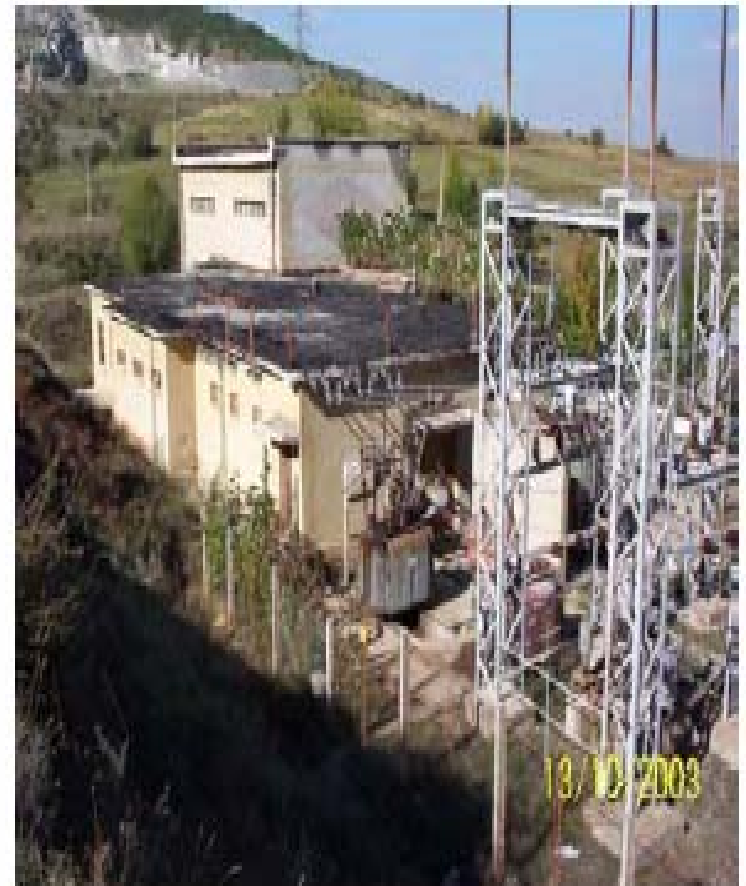
Electricity sale

- According to the price of sale of electricity approved by ERE, Albanian Power Corporation is authorized to sign with the concessionaire the long-term agreement for the purchase of electricity generated during the time APC will be a public corporation.

Before rehabilitation

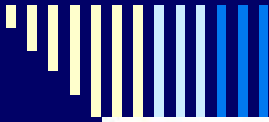






After rehabilitation









Thank you for your attention!
