



HYDRO-ELECTRIC POWER PLANT OTILOVICI - PLJEVLJA

BASIC PARAMETERS

Average multiyear flow on the dam profile	4.68 cubic meters/sec.
Total storage capacity	18.0 mil cubic meters
Effective storage capacity	13.0 x 10 ⁶ cubic meters
Elevation of the normal slope	837.0 m above sea level
Elevation of minimum slope	822.0 m above sea level
Maximum fall	43.0 m
Minimum fall	27.5 m
Length of pipeline of 1.8 m diameter	105 m

Basic power generating unit

Installed power of the turbine	2.635 MW
Installed flow	8.00 cubic meters/sec.
Nominal fall	36.50 m
Number of revolutions of the turbine	500 min ⁻¹

Auxiliary power generating unit

Installed power of the turbine	0.326 MW
Installed flow	1.00 m ³ /s
Number of revolutions of the turbine	1500 min ⁻¹

Energy production

For the average available flow of 4.68 cubic meters/sec. (Block I of the Thermo-electric Power Plant Pljevlja) E=11.52 GWh

For the average available flow of 3.88 cubic meters/sec. (Block I + II of the Thermo-electric Power Plant Pljevlja) E=10.44 GWh

Review of Basic Economic-Financial Indicators

The construction of the Hydro-electric Power Plant »Otilovi?i« would cause an additional increase of power generation in the system of the Electricity Company of Montenegro (Elektroprivreda Crne Gore), amounting to 11.52 GWh, i.e. an increase of installed power of about 3 MW.

According to the analyses made in the preliminary design, the economic indicators of this hydro-electric power plant are:

1. Building works	811,143.61 €
2. Engine equipment	562,421.07 €
3. Electric equipment	745,559.17 €
4. Founding investment (7% of 1+2+3)	148,338.56 €
5. Traffic roads	64,942.25 €
TOTALLY (without intercalary interests)	2,332,404.70 €
MODE OF INVESTMENT:	-JOINT VENTURE -CONCESSION

The specific investments (without intercalary interests) amount to 777.67 €/kW of installed power, i.e. 0.204 €/kWh of the realized production.

The average production cost price of electric energy of the Hydro-electric Power Plant »Otilovi?i« in the period of repayment of the loan would range between 1.26 and 3.24 c€/kWh, and after repayment of the loan it would amount to 1.06 c€/kWh. The proportion between benefit and cost of the project (parameter B/C) is 1.95.

The period of return of investment in the construction of the Hydropower Plant »Otilovi?i« can be expected after 8 years of exploitation (with an average sales price of 4 c€/kWh).

The building period of HE »Otilovici« is two calendar years.

The analyses made have demonstrated the justification of investment in the construction of HE »Otilovici«.