



Serbia Energy company EPS "Elektroprivreda Srbije" ordered construction of ideological project with feasibility study for small hydro power plant "Parmenac" with task to determine all features of plant's objects on the base of previous research work and expert opinions.

Geodetic recording has already been done, and ideological project construction is entrusted to Waterpower Engineering Institute "Jaroslav Černi" from Belgrade.

Hydro power plant on Zapadna Morava river, near Čačak municipality, will have two aggregates of total power of 1,78MW.

Urban Planning Documentation i.e. urban project is also being made for future plants, at the same time as technical documentation. General project is done in "Jaroslav Černi" Institute in Belgrade in 2011 and it determined place and basic values of the plant.

"Parmenac" dam with accumulation on Zapadna Morava, 5km upstream from Čačak, was built for irrigation requirements in 1957. It was used as compensation basin for HPP "Međuvršje", while it is still used as reserve source for waterpower in Čačak at the moment. HPP "Međuvršje" accumulation is practically showered so the plant works circulating mostly. So the requirement for compensation, which "Parmenac" accumulation would hardly accomplish, is not an option.

HPP "Parmenac" will be circulating plant with dams. Two variants were considered during locating of the machine construction. First location, which was chosen as the most affordable one, was imagined on the left side of the river with dams next to concrete construction of water intake for the irrigation system. Second was also on left side of river, little downstream from overflow sections.

The total power of HPP "Parmenac" will be 1,78MW, and annual production 7,8GW. Average flow on overflow is estimated on 33 cubic per second. It is planned for complete automatic work of plant without constant presence of motion staff and command for supervision and directing will be equipped within access space. The ongoing upkeep will be done in casual visits.

Two terms for payout of plant in Parmenac were calculated, one is 23 and other 18 years.

- The difference is that the shorter term considers so called CDM work i.e. subsidized price of this energy because it comes from renewable source which doesn't pollute environment - says mechanical engineer Ljubinko Filipović who has worked in "Elektromorava" from Čačak for three decades.

This corporation leads import plants in Ovčar Banja and Međuvršje.

"Parmenac" is predicted to cost 5,1million Euros with this general project for small plants on existing accumulations.

"Elektroprivreda Srbije" determined eight most perspective projects for incitement of renewable sources energy production with this project of energy development strategy accomplishing. Construction will be financed from its own funds and partly from European

Bank for Renovation and Development’s credit.

Accumulations like “Ćelije” on Rasina (the plant will cost 3,2million Euros), “Bovan” on Moravica, next to Sokobanja (2,5), “Barje” on Veternica near Leskovac (2,6), “Vrutci” on Detinja, 13km upstream from Užice (3,1), “Ribnica” on Crni Rzav in Čajetina municipality (0,5), “Selova” on Toplica, 18km from Kuršumlija (3,1) and “Rovni” on Jablanica 15km from Valjevo (1,6million Euros) were chosen next to “Parmenac”.

*Source Serbia Energy Magazine*