Immediately after its establishment, within the planned socialist economy in the former Yugoslavia, PPT Engineering was included in designing, manufacturing and commissioning of electro-hydraulic systems for gates on the HEPP Bajina Bašta, 1966. After this project, the most significant engagement of PPT Inženjering in the field of power engineering ensued, at the HEPP Djerdap 1 and 2, which was the crucial reason why the program of electro-hydraulic drive systems for hydro-mechanical equipment became the essential and the most important program of PPT Engineering operations. The experience gained in HEPP Djerdap 1 and 2, working together with partners from the USSR (later Russia), resulted in the intensive presence of PPT Engineering on the Russian market since 2000 and in the significant increase of business volume.

The organizational change in 2011 and presence on the vast territory of Russia, comprising numerous specific requirements for electro-hydraulic drive systems applied on hydro-mechanical equipment on intake structures and spillway bays of hydroelectric power plants, made it possible for PPT Engineering to be ranked and formed as a highly-specialized company for this type of electro-hydraulic systems in Europe.

By controlling movement of gates, electro-hydraulic systems control the water inflow to the turbine of the hydroelectric power plant, or stop it instantaneously in case of damage, and therefore it is essential to provide a high level of operation reliability of the system.

It is particularly important that PPT Engineering has preserved production resources of PPT for large cylinders, having diameters up to 500 mm and stroke up to 10,000 mm.

Projects on the Russian market which especially contributed to the fact that PPT Engineering nowadays occupies the unique market position are the following:
- HEPP Nižnja Bureja
- HEPP Zagorska
- HEPP Sajano Sushenska

The electro-hydraulic drive systems for complete hydro-mechanical equipment on previously mentioned hydroelectric power plants were delivered on two particularly important facilities in Tajikistan, HEPP Ragun and HEPP Snagtuda.
Dam spillways – hydraulic installations of double hooked gates
HEPP *Djerdap 1*, *HEPP Djerdap 2*, Serbia

**HEPP Djerdap 1**
Buyer: *Elektroprivreda Srbije*, Serbia
Commissioning: 1972
Electro-hydraulic systems for handling gates on water intake structure and on 12 dam spillways
Hydraulic cylinders for water intake structure Ø 600 18 meters stroke, 12 pieces
Hydraulic cylinders for dam spillways Ø 500 11.47 meters stroke, 28 pieces

**HEPP Djerdap 2**
Buyer: *Elektroprivreda Srbije*, Serbia
Commissioning: 1989
Electro-hydraulic systems for handling 8 quick closing gates
2009 - reconstruction of control blocks
Segment gate cylinder

HE Nizhnyaya Bureja, Rusija
HEPP Nizhnyaya Bureja, Russia

Buyer: Trust Hydromontazh, Russia
Delivery and commissioning: 2016
Electro-hydraulic systems for handling 5 segment gates on dam spillways and 4 quick closing gates on intake structure

Segment gate cylinder with support

Quick closing gate hydraulic set
Quick closing gate hydraulic set with power and automatic equipment cabinets
Buyer: Trust Hydromontazh, Russia
Delivery and commissioning: 2016. godina
Electro-hydraulic systems for handling 10 quick closing service gates of intake structure and 2 segment gates on spillway.

HEPP Sajano Shushenska, Russia

Spillway segment gate cylinder

Spillway segment gate cylinder with hoisting trunnion and control manifold
Pumped-Storage HEPP Zagorska 2, Russia

Quick closing gates hydraulic cylinders

Control block

Quick closing gates hydraulic aggregate

Buyer: Trust Hydromontazh, Russia
Delivery: 2011
Electro-hydraulic system for 4 quick closing gates drive
HEPP Sangtuda, Tajikistan

Buyer: Trust Hydromontazh, Russia
Electro-hydraulic system for 4 quick closing gates drive, 8 service spillway gates drive and 2 auxiliary spillway segment gates

Quick closing gate cylinder dia 500 millimeters and stroke 8,700 millimeters

HEPP Sangtuda, Tajikistan

HEPP Rogun, the Vahsha river, Tajikistan

Buyer: Trust Gidromontaž, Russia
Electro-hydraulic systems for control of segment, emergency-service and service flat gates on tunnels of galleries I and II and of temporary inlet tract gates for the first two sets

Hydraulic set of temporary inlet tract gate
1.6.2 Hydraulic cylinders of flat and segment gate

HEPP Zaramagskaya, Russia

Buyer: SSM, Russia
Commissioning: 2007
Electro-hydraulic system for quick closing gates drive on hydroelectric power plant intake structure

Hydraulic set

HEPP Zelenchukskaya, Russia

Buyer: PromGidroenergo Mach, Russia
Commissioning: 2014
Electro-hydraulic system for 2 quick closing gates drive on reservoir intake tunnel

Hydraulic set
HEPP Se San 3, Vietnam

Buyer: SGEM, Russia
Commissioning: 2005
Electro-hydraulic system for control of 2 quick closing gates on intake structure and 6 segment gates on dam spillways

Segment gate cylinder installation

HEPP Shikapa, Angola

Buyer: Trust Hydromontazh, Russia
Commissioning: 2006
Electro-hydraulic system for control of 4 flat gates on water outlet and 1 quick closing flat gate