

# KAMCHATKA

## Investment opportunities

**PROJECT:**

Construction of the cascade hydropower plants  
«Zhupanovsky»

# Construction of the cascade hydropower plants “Zhupanovsky”

- ❖ NAME: Construction of the cascade hydropower plants «Zhupanovsky»
- ❖ LOCATION: Zhupanova river, Kamchatka, Elizovsky municipality
- ❖ GOAL: Integrated development of the Kamchatka region using the renewable clean energy sources of rivers and tides and, as a consequence, a significant reduction of production costs and electricity tariffs for the consumers; framing infrastructure base for accelerated development of the region.

# THE PROJECT INCLUDES CONSTRUCTION of 3 hydropower stations:

## ❖ Zhupanovsky HPP-1

122 meters high, flooding area - 13.6 thousand ha,  
firm capacity - 170 MW, installed capacity -270 MW,  
annual electric power generation -1300 million kW/h

## ❖ Zhupanovsky HPP-2

99 meters high, flooding area - 2.45 thousand ha,  
firm capacity - 34 MW, installed capacity -90 MW,  
annual electric power generation - 474 million kW/h

## ❖ Zhupanovsky HPP-3

83 m high, firm capacity - 23 MW, installed capacity - 55MW,  
annual electric power generation -275 million kW/h.

# Infrastructure Development

❖ The total length of 220 kV transmission lines will be 310 km

## Construction of roads:

- ❖ Petropavlovsk-Kamchatsky - Zhupanovsky HPP-1 - **131 km.**
- ❖ Zhupanovsky HPP-1 - Zhupanovsky HPP-2 - **71 km.**
- ❖ Zhupanovsky HPP-2 - Zhupanovsky HPP-3 - **34 km.**

# KEY INDICATORS

- ❖ Considered drainage area **6980 sq.m.**
- ❖ Power, productive capacity - **415 MW**
  - ❖ 1<sup>st</sup> stage - 1,290 million kW · h/year
- ❖ Annual power generation **2,039 million kW · h**
  - ❖ 2<sup>nd</sup> stage 2 - 474 million kW · h/year
  - ❖ 3<sup>rd</sup> stage - 275 million kW · h/year
- ❖ Annual electricity **1,264.2 million kW · h**
  - ❖ 1<sup>st</sup> stage - 774 million kW · h/year
  - ❖ 2<sup>nd</sup> stage - 284.4 million kW · h/year
  - ❖ 3<sup>rd</sup> stage - 165 million kW · h/year

# ECONOMIC DATA

❖ Capital Investments including reinvestments

**2 900 MM USD**

❖ Total Revenue for Realization of Product

**28 740 MM USD**

❖ IRR

**10,9%**