**Requirements specification**

Rehabilitation of the turbines’ rotary shutters (valves) control systems at “Zhinvali” HPP

A rotary shutter (valve) (type 3 Дп 220-166) is installed on the turbine pressure pipeline and it is an operative-emergency closing mechanism. So called shaky servomotors (2 units) are used for the shutter moving function. Bypass is used for previous levelling of pressures in the pipeline. Turbine regulation system oil pressure unit (working pressure 40 Bar) is used for bypass and servomotors putting into operation.

Works (tasks) should be done for the rehabilitation:

1. To make project of rehabilitation-reconstruction;
2. Total set of pipelines should be replaced according to the factory specification;
3. Control panels replacement (4 sets);
4. Limit switchs replacement (4 sets);
5. Control system should be made an automatic and a manual mode;
6. Integration of automated control system into turbine control system