

### 3.08. AUTOMATED CONTROL SYSTEM OF ELECTRIC DRIVES OF TECHNOLOGICAL EQUIPMENT OF BOILER HOUSES

The developed automated control systems of electric drives (ACSED) of line and feed pumps, smoke exhausters and air supply fans to the boiler allow to save more than 50% of consumed electric power and up to 10% of energy fuel in the boiler houses of small and average power, increase boiler maneuverability, reduce the costs on maintenance and repair of electrical equipment of boilers, increase service life of the main and auxiliary equipment of boilers.

#### *Main technical specifications of ACSED:*

- multiloop systems of boiler technological parameters;
- operating range of speed control of electric drives – 10:1;
- accuracy of the maintenance of boiler technological parameter in terms of a sharp load change (heat-carrier medium selection) – no worse than 1%;
- possibility of diagnostic operation, control, management of electric drives or the boiler house as a whole using the panels of control and visualization, including the methods and means of remote communication;
- functional readiness to operate in ACSED of any level.



*ACSED were implemented in boilers such as DKVR (ΔKBP) and TVG (TBF) at many boiler houses of industrial enterprises and municipal services of Ukraine.*