

System of chemical reagents preparation and supply KBD-1

System of chemical reagents preparation and supply provides maintenance of control of the primary circuit water chemistry regime.

KBD-1 system provides:

- preparation and temporary storage of chemical reagents with certain concentrations;
- chemical reagents supply for at the first filling of the primary circuit and ECCS tanks;
- chemical reagents supply for maintenance of the WCR control parameters and parameters of the emergency system tanks at working on capacity.

The system consists of tanks with ammonia, hydrazine-hydrate, potassium hydroxide solutions, mixing apparatus for zinc acetate solutions preparations, drop catchers, dose pumps for supply of ammonia, hydrazine-hydrate, potassium hydroxide and zinc acetate solutions, armature, pipelines.

Dose pumps supply chemreagents to the KBA pumps for the primary circuit WCR maintenance:

- ammonia solutions for creating and supporting of hydrogen control level in the primary circuit;
- hydrazine-hydrate solution for removing of oxygen from the primary circuit coolant at the NPP launch, also for removing of oxygen from water and boric solutions, that supply to the primary circuit at the boric regulations regimes;
- potassium hydroxide solution for creating and supporting of pH value in the primary circuit coolant;
- zinc acetate solution for dose capacity reduction from the primary circuit equipment and for limitation of personal irradiation.