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### **Vitrification of NPP Liquid Boron-Containing Radioactive Waste**

The paper overviews conditioning of liquid boron-containing radioactive waste of Ukrainian NPPs with WWER by its immobilizing into borosilicate glass known to be resistant to temperature and leaching. Ca-bentonite from Cherkassy deposit of bentonite and palygorskite clays can be used as a glass-forming material. It is proposed to perform simultaneous conditioning of boron-containing intermediate-level liquid radioactive waste of NPPs (salt fusion cake, evaporator bottoms) and high-silicon high-level waste, namely lava-like fuel-containing masses in the Shelter, using cold crucible induction melting technology.

*Keywords: liquid radioactive waste; borosilicate glass; vitrification; lava-like fuel-containing masses.*