

## WWR-K Reactor Upgrades Related to HEU/LEU Conversion

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WWR-K is a light water 6 MW research reactor operated by the Institute of Nuclear Physics in Almaty, Kazakhstan. Activities on conversion of the reactor from HEU to LEU fuel are in progress. LEU fuel assembly for WWR-K has been designed and tested. Necessary modifications of some reactor systems are carried out in frame of the conversion programme.

replacement of instrumentation and control (I&C) system electronics;

replacement of control rods, control rod drives, channels and support structure for mounting the channels;

replacement of emergency cooling system with an uninterruptible power supply and the emergency sprinklers for the reactor core;

replacement of radiation monitoring system;

installation of gas and aerosol emissions monitoring system;

installation and testing of additional new cooling towers;

Also, a detail inspection of the reactor tank and primary circuit piping has to be done. Startup of the WWR-K reactor with LEU fuel is expected in the end of 2015. This work is supported by the US Department of Energy and Ministry of Energy of Kazakhstan.

### Organization

Institute of Nuclear Physics

### Country

Republic of Kazakhstan

**Author:** Mr CHAKROV, Petr (Committee of atomic and energy supervise and control)

**Co-author:** Mr NAKIPOV, Darkhan (Committee of atomic and energy supervise and control)

**Presenter:** Mr CHAKROV, Petr (Committee of atomic and energy supervise and control)

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