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## First One-Year Operation of the WWR-K Research Reactor with LEU Fuel

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## **ABSTRACT**

The WWR-K research reactor physical and power startups with LEU fuel were performed in the first half of 2016. Results of the physical and power startups demonstrated that WWR-K reactor experimental performance was improved after conversion. The next stage of reactor conversion is creation of annular beryllium reflector via step-by-step loading of the beryllium blocks to core, compensating fuel burning out.

Regular operation of the WWR-K reactor with LEU fuel was started on September 2016. In the first year the LEU-converted reactor operated for 188 EFPD. As a result, 31% of the uranium 235 burnup in central FA was reached. During a year, the experimental and irradiation activities were carried out. For today, 27 FAs and 16 beryllium blocks are in the reactor core.

The paper presents the first-year experience of the WWR-K research reactor operation with LEU fuel.