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# PERSONNEL TRAINING IN UNIVERSITY FOR DECOMMISSIONING OF NUCLEAR FACILITIES: EXPERIENCE AND PROSPECTS

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Abstract: Nowadays the decommissioning of nuclear facilities issue is becoming increasingly important in the world and in the Russian Federation as well. For successful and safe decommission the availability of qualified trained personnel is an essential requirement. As far as NPP decommissioning is developing, it is necessary in addition to retraining and advanced training of employees of the nuclear industry organizations train specialists in decommissioning area as far back as their studying in a university. At the Obninsk Institute for Nuclear Power Engineering of the National Research Nuclear University MEPhI specialist training in decommissioning was conducted as early as in the 2000s. Gathered experience allows now to start personnel training in the NPPs decommissioning. In the report existing experience of personnel training is presented as well as possible options of such training for different work skills and training time. Further some considerations regarding personnel training for foreign countries with Soviet build nuclear facilities are presented.

1. INTRODUCTION Nowadays the decommissioning of nuclear facilities issue (especially with regard to nuclear power plants) is becoming increasingly important in the world and in the Russian Federation as well. In the beginning of the 21st century this process was started for five NPP units only in Russia (the first Obninsk nuclear power plant and the first stages of Novovoronezh and Beloyarsk NPPs). Now on the agenda are decommissioning of four units of Bilibino NPP and 2nd stage's two units of Novovoronezh NPP [1]. For 1st generation RBMK-type units (Leningrad and Kursk NPPs) the problems with graphite are successfully resolved, but decommissioning of several units cannot be excluded.

#### 2 METHDOS

The decommissioning is a complex process with technical, organizational and social aspects. For successful and safe decommission the availability of qualified trained personnel is an essential requirement. It should be noted that immediate dismantling of equipment is performed by regular personnel just as delayed dismantling is likely to be carried out by new staff with no operation experience. Given that to date NPPs decommissioning was carried out in a rather limited extent, personnel training was mainly carried out by the nuclear industry organizations such as nuclear power plants, training and engineering centers and so on. As far as this process is developing, it is necessary in addition to retraining and advanced training of employees of the nuclear industry organizations train specialists

in decommissioning area as far back as their studying in a university.

#### 3. RESULTS

- At the Obninsk Institute for Nuclear Power Engineering of the National Research Nuclear University MEPhI specialist training in decommissioning was conducted in the 2000s based on Nuclear reactors specialty. The main emphasis was placed on the addition of courses related to regulatory and legislative acts, radiation safety and technical issues. Gathered experience allows now to start personnel training in the NPPs decommissioning based on specialties named "Nuclear power plants: design, operation and engineering" and "Nuclear reactors and materials."
- 4. CONCLUSIONS In the report existing experience of personnel training is presented as well as possible options of such training for different work skills and training time. Further some considerations regarding personnel training for foreign countries with Soviet build nuclear facilities are presented.

### REFERENCES

[1] ZIMIN, V.K., KORNEEV, I.I., Decommissioning as a management tool for multi-unit NPP service life, Nuclear and Environmental Safety 3 (2012) 78–80.

## **Country or International Organization**

Russian Federation

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