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ОЦІНКА ДОЗОВОГО НАВАНТАЖЕННЯ ПРИ ДЕМОНТАЖІ РЕАКТОРА ВВР-М

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Реактор ВВР-М є гетерогенним дослідницьким реактором з легководним охолодженням і сповільнювачем з тепловою потужністю 10 МВт. Наразі триває остаточне планування зняття з експлуатації. Загальна стратегія зняття з експлуатації полягає в демонтажі та окремому вилученні громіздких елементів цілими без попередньої сегментації. Демонтаж первинного та вторинного контурів охолодження розглядається як одне з ключових завдань; розроблено проект окремого демонтажу. У даній роботі представлено основні принципи технічного рішення та безпеки. Результати дозової оцінки показали, що роботи можна виконати при колективній дозі менше 20 чол-мЗв.

Ключові слова: реактор типу ВВР, зняття з експлуатації, контури охолодження, демонтаж, доза опромінення.

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ASSESSMENT OF THE DOSE LOAD DURING THE DISMANTLING OF THE WWR-M REACTOR

The WWR-M is a light-water-cooled and moderated heterogeneous research reactor with a thermal output of 10 MW. The final decommissioning planning is in progress now. The general decommissioning strategy consists of the dismantling and separate removal of the bulky elements as a whole (in one piece) without preliminary segmentation. The dismantling of the primary and secondary cooling loops is considered as one of the key tasks; a separate dismantling design has been developed. The baseline principles for the technical solution and safety are presented in the given paper. Results of the dose assessment showed that the work can be performed at a collective dose of less than 20 man-mSv.

Keywords: WWR type research reactor, decommissioning, cooling loops, dismantling, exposure dose.

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