

J11. Oskarshamn 1: BWR**Sweden****Decontamination of RWCU Using the Cord Process**

Description: System/component decontamination of reactor water cleanup (RWCU) for the purpose of reducing the dose rates in and around the system. The CORD method (Chemical Oxidation-Reduction Decontamination) developed by Siemens-KWU was used.

Comments: The total amount of released radioactivity was 1.2 TBq. An average decontamination factor was calculated to be 4.3 and the dose rates were reduced in average by 77%.

The collective dose for the planned maintenance work, without system decontamination, was calculated to be 400 mman-Sv. That would have been about one-fifth (1/5) of the total collective dose for the outage period. After the decontamination, the maintenance work was carried out with a total collective dose of 85 mman-Sv. The collective dose for the system decontamination was 50 mman-Sv. Apparently, the dose saving was about 250 mman-Sv.

The total cost for the system decontamination was \$155,000. That gives the figure \$620 per mman-Sv. This was the first real system decontamination at Oskarshamn Nuclear Power Plant. We are happy with the results, and it is likely that more system decontaminations will be carried out in the future.

For additional information contact: Christer Sohlstrand, Oskarshamn Nuclear Power Plant, OKG Aktiebolag, S-570 93 Figeholm, Sweden, Phone:46-491-86000.