

## “Braidwood Station Alternate Post Peroxide Cleanup Methodology“

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This is a presentation concerning water chemistry control at the time of shutdown, particularly an improvement in the operation to remove radioactive and corrosive organisms after oxidation operation with the addition of hydrogen peroxide. In the improvement method, the operation to remove radioactive and corrosive organisms was carried out by isolating a pressurizer, steam generator and part of the CV/letdown area with the total amount of water limited to 58% of the original. In removing radioactive and corrosive organisms, the following methods were adopted.

- ✓ Both FC Demins put into service.
  - Outage unit provides cavity - cavity cleanup capabilities.
  - Operating unit provides spent fuel pool - cavity cleanup.
- ✓ Use of 1 micron PAL filters in both Tri-Nukes (600 & 240)

The peak dissolution activity after oxidation operation was 12.8  $\mu\text{Ci/ml}$ . The actual cleanup prior to flood up was 0.028 mCi/ml and the final cleanup was 0.015 mCi/ml with a cleanup period of 40 hours.

Due to the abovementioned improvement in the cleanup methodology to remove radioactive and corrosive organisms, the lowest ever exposed dose in the nuclear power plant was recorded during the steam generation maintenance operation of Braidwood Unit 1.

