

Introduction

PHWR is different from PWR because of tritium. So, it is not easy to supervise radiation safety management than other Power Plant. Especially, in the steam generator, the workers have to operate at narrow space for a long time and concentration of tritium that contribute to internal exposure are very high. So, we introduce some examples to the other workers engaged in radiation safety management.

Radiation safety management for Opening and closing of Steam generator man-way

Before starting Opening and Closing of S/G man-way operation, we have ALARA Committee and Pre-Job Briefing to reduce occupational exposure and take appropriate measures and review work plans to check work conditions. Through Mock-up training, workers can prepare for actual work and save working hours. And we can decrease external exposure by various means such as posting radiation information at the entrance, wearing lead shielding clothes at high radiation controlled area, installing lead shielding for hot spot and so on. We can also prevent form internal exposure as installing a temporary ventilation facility and wearing encapsulated plastic suit. Through these ways, we can reduce external and internal exposure.

Conclusion

It is very important to consider concentration of tritium at PHWR Power due to the fact that tritium contributes internal exposure to the workers. For example, as temporary ventilation fan was installed during the work as well as before and after work, we could keep concentration of tritium as low as possible. Also we induce workers to low radiation controlled area when they work on Cover Bolt Cleaning. These kinds of cases can be good information to the others.