N359. Some Good ALARA Practices At Big Rock Point (Part II, Continued)

7) Decontamination Containment - Prior to the refueling outage a plexiglass containment was installed in the decontamination room to allow the removal of material from higher radiation areas to another room for cleaning by high pressure washing, etc. A good means of dose reduction resulted as well as radwaste reduction as in the past tents made of fire retardant plastic would have been constructed.

8) Lighting Project - This project probably had the greatest effect on reducing worker exposure. The engineering department with assistance from the dose reduction team purchased temporary lighting for the RCP room and Steam Drum in addition to a power panel to distribute power to the lighting and make available outlets that in the past were just not there. The total dose to install the lighting and power panel was 900 mrem. The total savings is very difficult to determine but the about of time saved by workers stringing out extension cords and circus lights not to mention the time saved by working in better lighting was substantial. 9) Shielding Packages - Support from the engineering department in getting the packages done was excellent. The Siemens work in the fuel pool caused a carry over of corrosion products to the remainder of the fuel pool system. The fuel pool heat exchanger room became a high radiation area and a shielding package was also installed on the piping next to CV-4184 that cut the general area dose rates by 50% as this valve had to be cut out and a new valve installed.

10) Resin Sluicing - Prior to work commencing in the clean up demin pit the resin is sluiced out of the demin. In the past dose rates have remained higher than wished for resulting in higher dose to workers. This year the operations department did a excellent job in removing the resin and with the Health Physics department standing by and performing surveys as the resin was removed, excellent general area dose rates were achieved. Much time was to be spent in the pit this refueling outage performing overhauls on three control valves and ISI exams on piping and the demin. General area dose rates of 40-50 mrem/hr were worked in that in the past had dose rates of 200-250 mrem/hr.

11) New turbine grating door were installed on the turbine. In the past, two workers were required to make entries through the pipe tunnel. Past entries made into the pipe tunnel result in workers receiving approximately 582 mrem for steam leak repairs. With the installation of the new turbine grating doors there has been a 48% reduction in exposure as there is no need for workers to transit past the HP & IP heaters, as in the past.

For more, "BWR Owners' Group Radiation Protection/ALARA Committee Plant Status Report," by E. Garrison. For further information, contact E. Garrison at (616) 547-8128.