

N389. HP Video, Audio System Saves Dose During Outage

Florida Power Corporation's Crystal River-3 nuclear plant for the first time utilized the services of video and audio equipment and video services personnel to support its health physics (HP) coverage during its ninth refueling outage last year.

The plant used the Health Physics Overview(HPOV) system, which consisted of an HP control center and auxiliary control station located in a video trailer. Each location contained joystick control to eight cameras and the reactor building. The system broke down into two subsets: the refueling segment and the steam generator segment, with each containing wireless communications with the reactor building. Refueling cameras were located in the refueling canal, the incore pit, on the reactor vessel head, and in the spent-fuel pool. The wireless communication allowed an HP member known as a rover to move freely throughout the reactor building. The refueling system also had a wired hookup on the reactor vessel head for the crew members to communicate with the HP control center and reactor building rover. It also contained a wired hookup in the spent-fuel pool to allow communications with the control center. A monitor was set up on the refueling floor to allow the HP rover to monitor the work without being exposed to higher dose areas.

Steam generator cameras were located in four tents covering the upper and lower manways on the two steam generators. Wireless communication allowed the HP personnel covering the upper and lower the HP personnel covering the upper and lower mayways to keep in continuous communication with the platform workers, the control center, and the steam generator control center. Two remote monitors were also set up in a low-dose area to allow the HP rovers to monitor the work.

The HPOV system was able to save dose, cutting the amount in half from Crystal River's previous outage.

Taken from, "HP Video, Audio System Saves Dose During Outage," Nuclear News, pg.52, January 1995.