

“Sustained Performance in Radiation Protection at the Vogtle NPP”

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The Vogtle Nuclear Power Plant won the 2006 World Class ALARA Performance Award in recognition of its strenuous efforts, such as exposure reduction by 0.1 mrem units, detailed planning, lessons learned, WG’s cooperation, challenging/aggressive goal setting and constant vigilance not to make mistakes, resulting in the improvement of its performance to such a degree that its collective dose is ranked in the top quarter. There were the memorable remarks that in spite of occasional objections from the field to health physicists they had continued their exposure reduction efforts with zeal and stubbornness, believing that the door would open if it was knocked on 1,000 times. Concrete measures are as follows:

- Compensation for contractors in outages, mockup training, dry runs
- Source term reduction (high pH control, Zn injection, ultrasonic cleaning of fuel, shutdown water chemistry, filter improvement)
- Shielding improvement (the permanent shielding support frame of SG platform, the permanent shielding of containment head, the storage of shielding material in containment, etc.)
- Remote monitoring (leak detection robot inside biological shielding; standing camera and dosimeter to observe mid loop, containment cavity, core barrel removal, etc.; video, audio and telemetry in containment for the central monitoring station)
- Operation records with images (DVD records of moving and still images)
- Automatic dosage mapping (Radis: wireless collection of the survey results of 70,000 locations, electronic mapping, 360 degree indoor images, automatic intake of remote monitoring data). Due to the introduction of Radis, the exposed dose of health physicists decreased to 5% of the total (usually, it is 20 to 25%).

