

“Upgrading of Personal Dose Evaluation with Electronic Personal Dosimeters for Nuclear Power Plants”

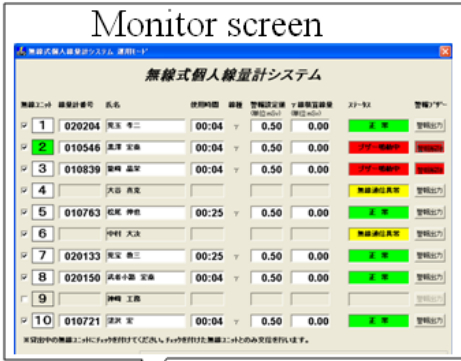
Mr. Fujii (Japan Atomic Power)

This is a presentation concerning the advancement of personal dose control in Japan Atomic Power. The purposes of personal dose evaluation are: (1) dose evaluation, (2) the entrance control of controlled areas and (3) the prevention of radiation overexposure. Japan Atomic Power used to use film batch (FB) for dose evaluation, automatic reading type thermo luminescence dosimeter (ATLD) for the entrance control of controlled areas, and personal dosimeters with an alarm for the prevention of radiation overexposure, as the situation demanded.

Since 2000, by introducing electronic personal dosimeters (EDP), the personal dose control where divisions were conventionally made depending on three purposes has been unified and integrated into the EDP, and the advancement of control has been achieved. The EDP excels in the energy characteristics of radiation, and also the γ type and the $\gamma + \beta + n$ type can be used selectively depending on the operation. It is user-friendly for operators and highly reliable. Moreover, due to the introduction of a wireless personal dose measurement system, the dose data which used to exist in a scattered fashion under no centralized management are uniformly managed by radiation controllers, and there are no longer cases where the prevention of radiation overexposure is left to each operator.


It is envisaged that the centrally managed dose data will be utilized for various uses aiming at exposure reduction.

3. Sophistication of personal dose control

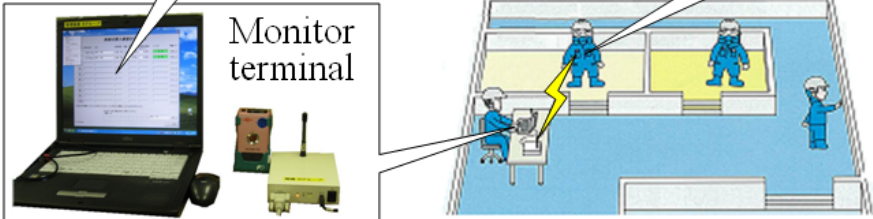


Monitor screen


無線ID	無線ID番号	氏名	稼働時間	累積	管理設定値	超過管理値	アラート	管理ステータス
1	020204	関本 孝二	00:04	0.50	0.00		正常	管理中
2	010546	高野 文雄	00:04	0.50	0.00		アラート発生	管理中
3	010839	斎藤 温平	00:04	0.50	0.00		アラート発生	管理中
4		大谷 真実					無線ID異常	管理中
5	010763	佐藤 伸也	00:25	0.50	0.00		正常	管理中
6		中村 大次					無線ID異常	管理中
7	020133	関本 孝二	00:25	0.50	0.00		正常	管理中
8	020150	高野小波 実雄	00:04	0.50	0.00		正常	管理中
9		斎藤 工務						管理中
10	010721	関本 孝	00:04	0.50	0.00		正常	管理中



worker



Monitor terminal



The Japan Atomic Power Company

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