



October, 1999

ISOE INFORMATION SHEET

**Japanese Occupational Exposure
During Periodical Inspection
At LWRs Ended In FY 1998**

ISOE Asian Technical Center - NUPEC Information Sheet No. 12

This ISOE information sheet presents the Japanese occupational exposure results during the periodical inspection at LWRs ended in FY 1998, and trends for several years by reactor type or by Japanese plant type (Conventional type/Improved type*).

Tables 1 and 2 give the average collective dose per reactor during the periodical inspection for PWRs and BWRs, respectively, ended in FY 1997 and FY 1998. The FY 1998 has been marked by the decrease in dosimetric results for PWRs and the increase for BWRs.

Figures 1 to 4 show the average collective dose per reactor by reactor type and by plant type (Conventional/Improved type) from FY 1988 to FY 1998. The trend of annual exposure evolution depends on mainly the dosimetric result of the Conventional type for both PWRs and BWRs since the Improved type has progressed steadily in a low level as compared with the Conventional type.

Figures 5 and 6 show the correlation between collective dose and length of the periodical inspection ended in FY 1990 to FY 1998. The results for FY 1998 are marked in the lower and shorter portion than the results for the previous year and before.

Table 1. Average dose results during periodical inspection ended in FY 1998 and FY 1999: PWRs

Plant type	Average collective dose (in person-Sv)	
	FY 1998	FY 1999
Conventional type	1.45	1.88
Improved type*	0.65	0.72
Total PWRs	0.97	1.28

Table 2. Average dose results during periodical inspection ended in FY 1998 and FY 1999: BWRs

Plant type	Average collective dose (in person-Sv)	
	FY 1998	FY 1999
Conventional type	3.96	4.45
Improved type*	1.09	0.93
Total BWRs	2.26	2.16

* Improved type plants came into commercial operation in and after FY 1993 with improved design features intended for enhanced reliability, lower exposure and more efficient inspection works.

Figure 1

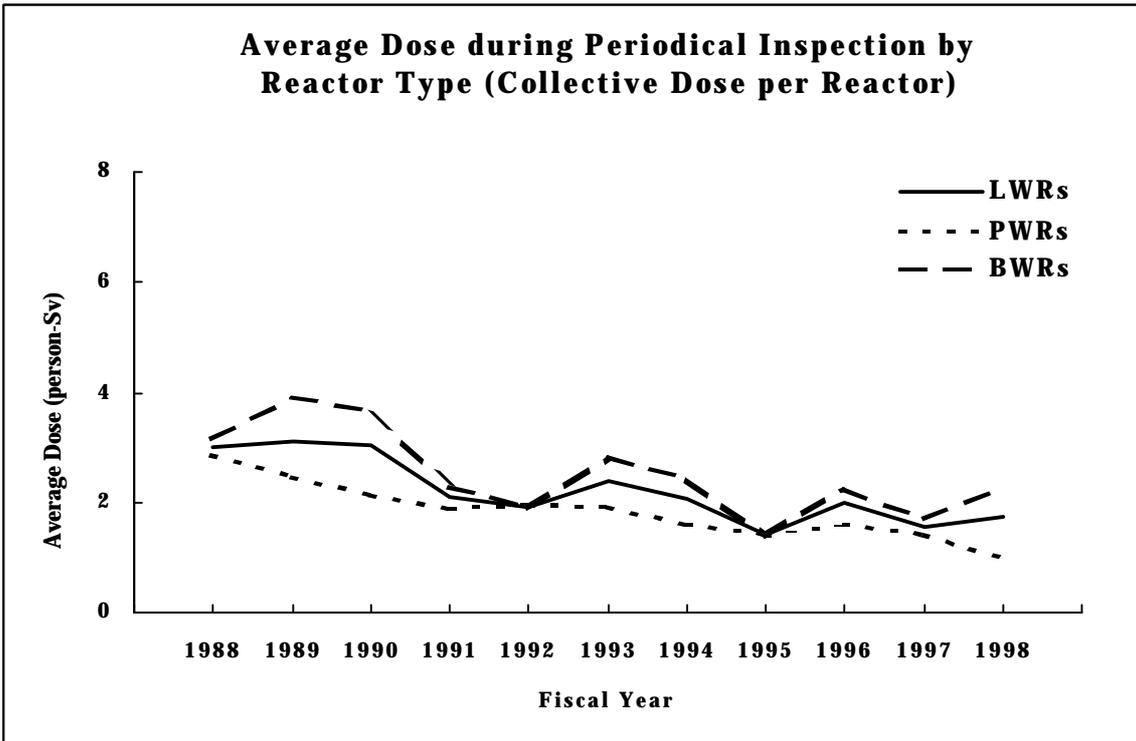


Figure 2

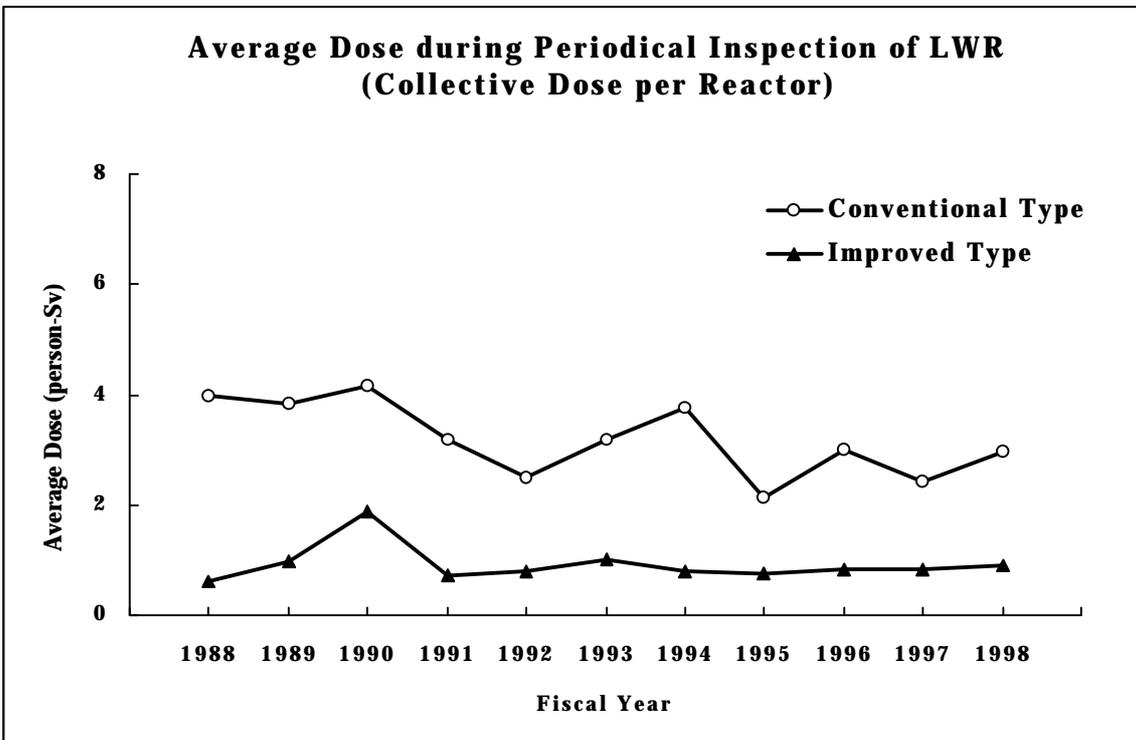


Figure 3

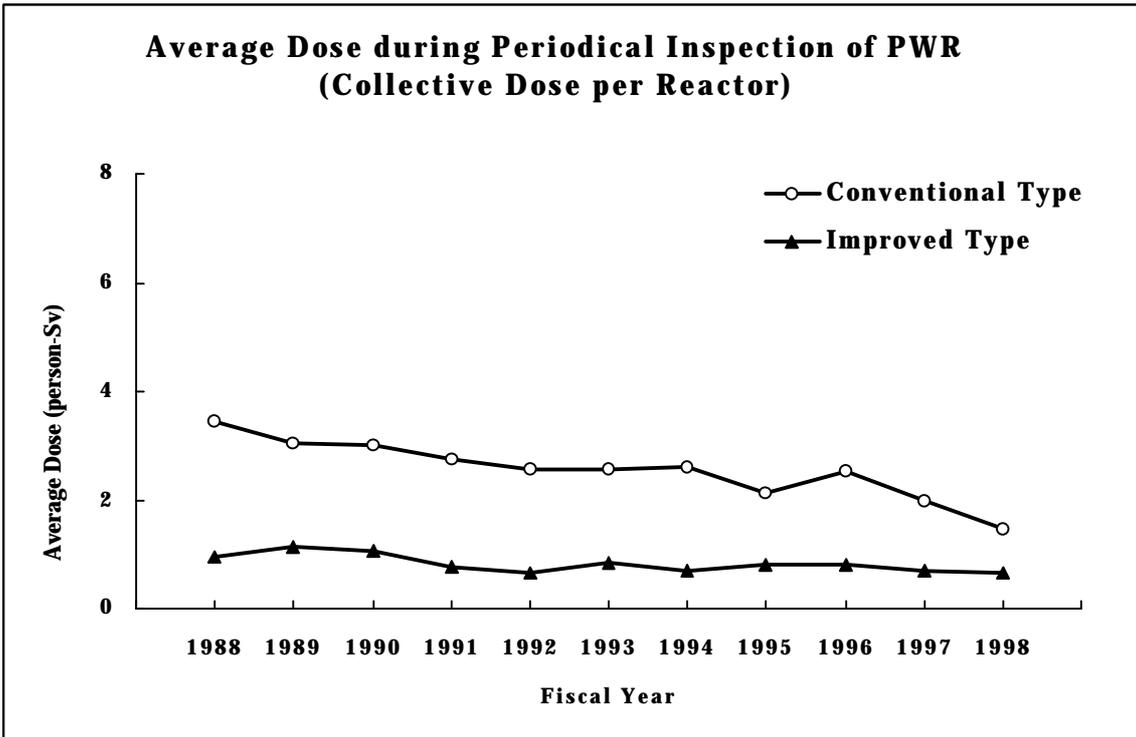


Figure 4

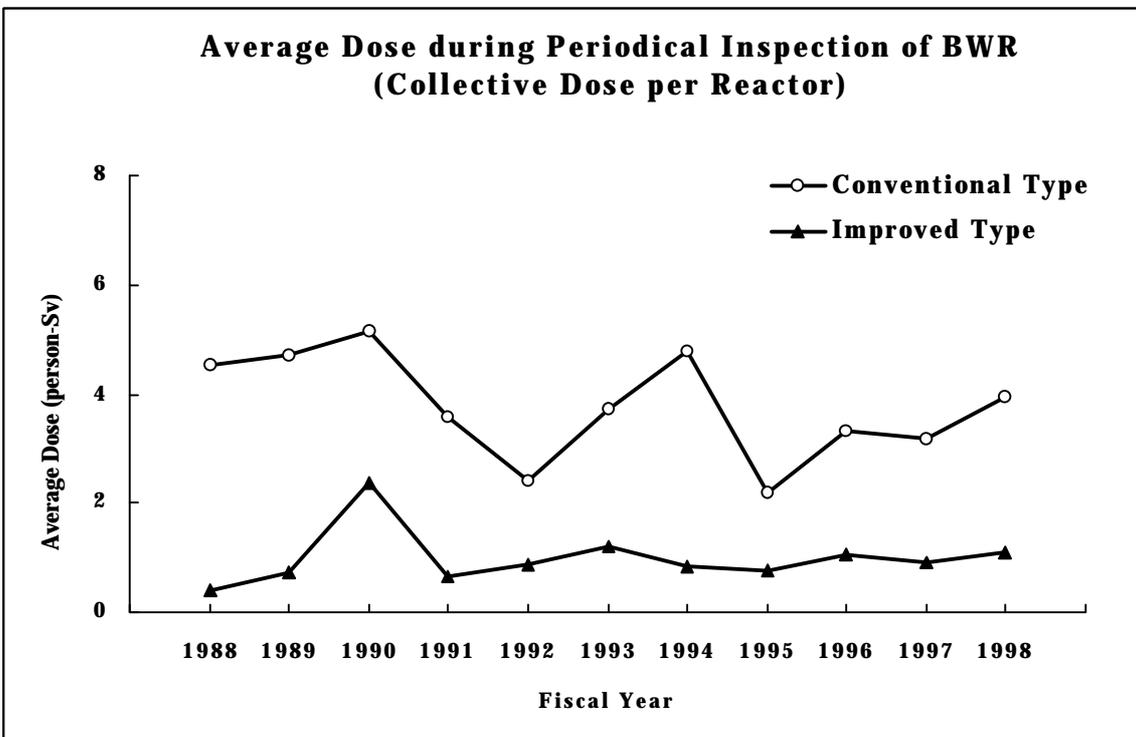


Figure 5

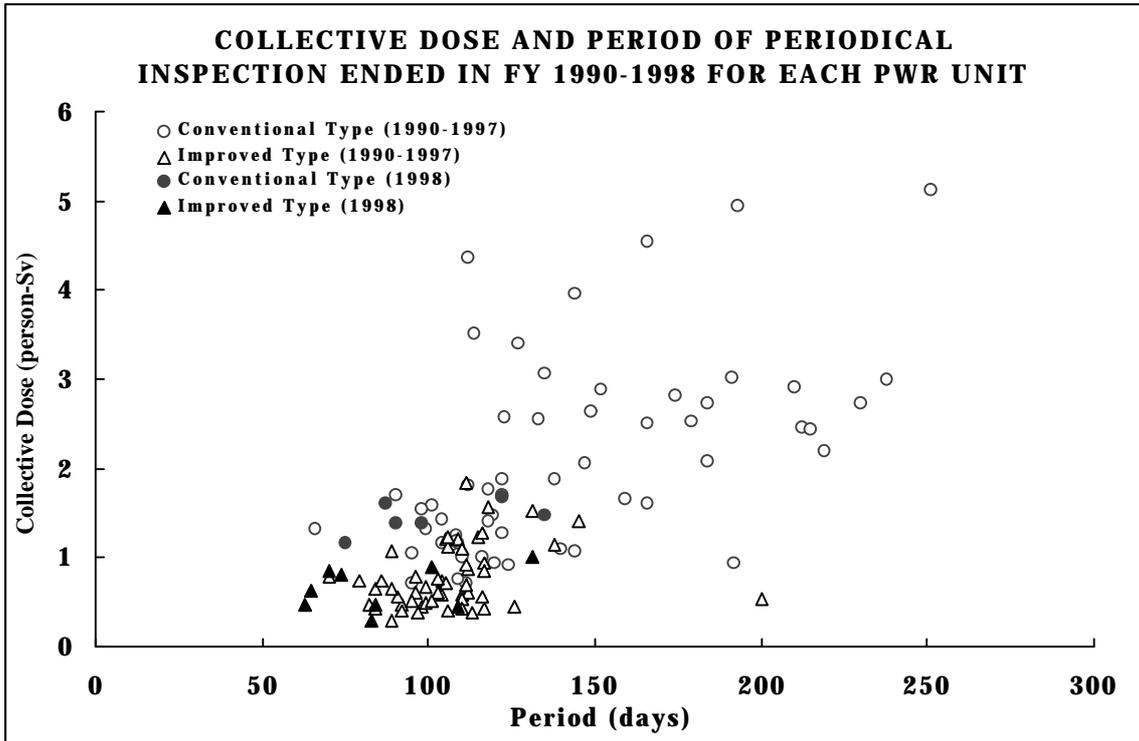


Figure 6

