OECD Nuclear Energy Agency
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ISOE INFORMATION SHEET

JAPANESE OCCUPATIONAL EXPOSURE DURING PERIODICAL INSPECTION AT PWRS & BWRS ENDED IN FY 2001

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This ISOE information sheet presents the Japanese occupational exposure results during the periodical inspection at PWRs and BWRs ended in FY 2001, and trends from FY1988 to FY2001 by reactor type or generation (Conventional type/Improved type*). Table 1 and 2 give the average collective dose per reactor during the periodical inspection for PWRs and BWRs, respectively, ended in FY 2000 and FY 2001. The collective dose of conventional type of BWRs in FY 2001 was still relatively high level, although it decreased in comparison with the one of FY2000. It was due to the modification works, such as shroud replacement etc, continued in FY 2001. The collective dose for conventional type of PWRs increased was due to Steam Generator replacement, and increase of the collective dose for improved type of PWRs was due to maintenance works for Steam Generator.

Figures 1 to 3 show the average collective dose per reactor by reactor type and by generation from FY 1988 to FY 2001. The evolution of annual exposure depends largely on the dosimetric results 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 4 through 7 show the correlation between collective dose and length of the periodical inspection period ended in FY 1991 to FY 2001. From these figures, it can be seen that the results for Improved type are marked in the lower and shorter portion than the Conventional type as a whole.

Table 1. Average dose results during periodical inspection ended in FY 2000 and FY 2001: PWRs

Plant type	Average collective dose (in person-Sv)	
	FY 2000	FY 2001
Conventional type	1.65	1.89
Improved type*	0.84	1.13
Total PWRs	1.22	1.44

Table 2. Average dose results during periodical inspection ended in FY 2000 and FY 2001: BWRs

Plant type	Average collective dose (in person-Sv)	
	FY 2000	FY 2001
Conventional type	5.35	3.98
Improved type*	0.81	1.51
Total BWRs	2.85	2.45

* 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

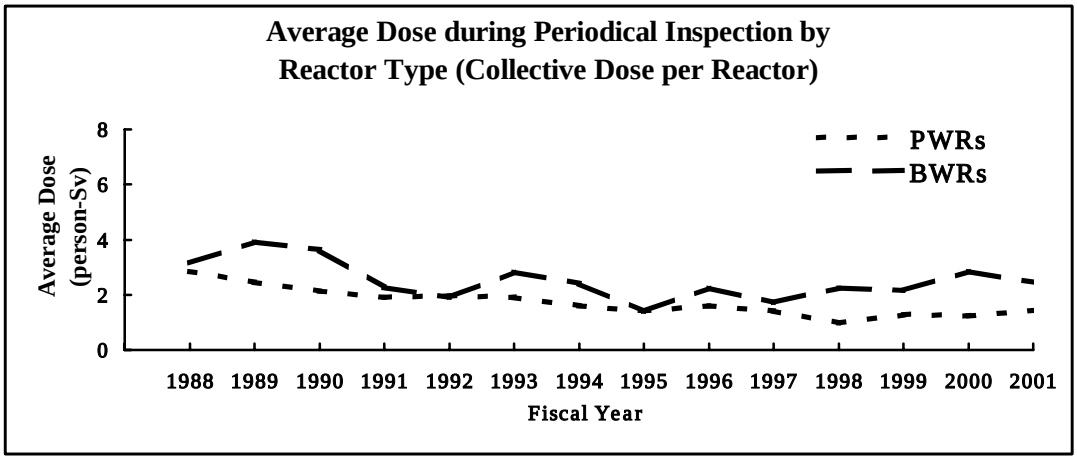

Figure 2

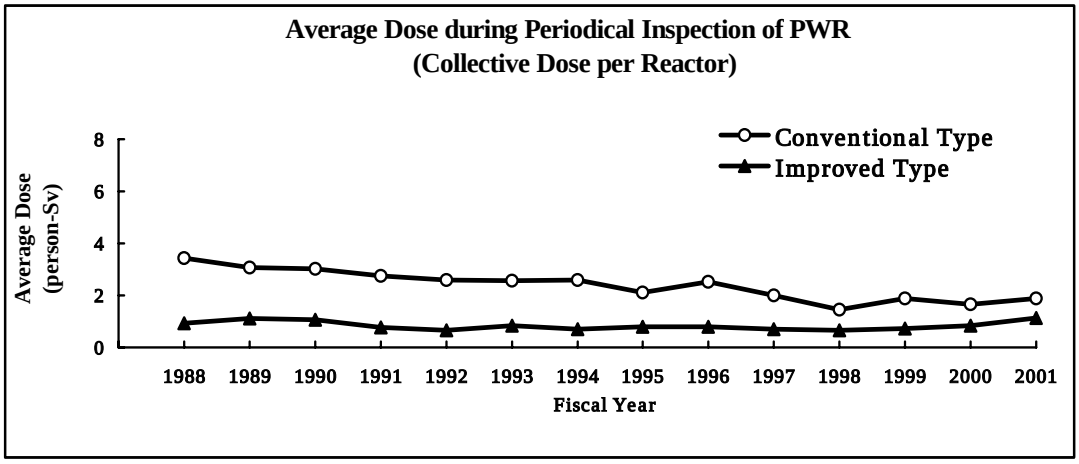

Figure 3

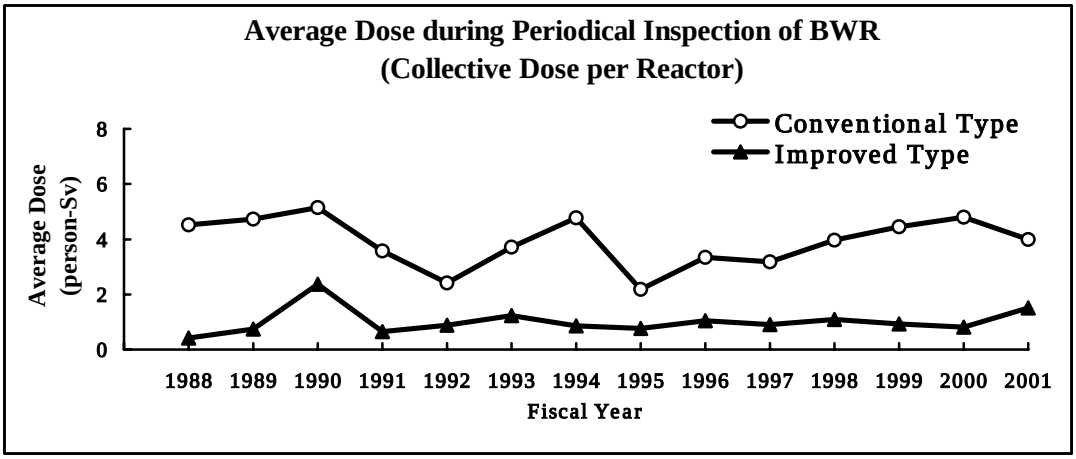

Figure 4

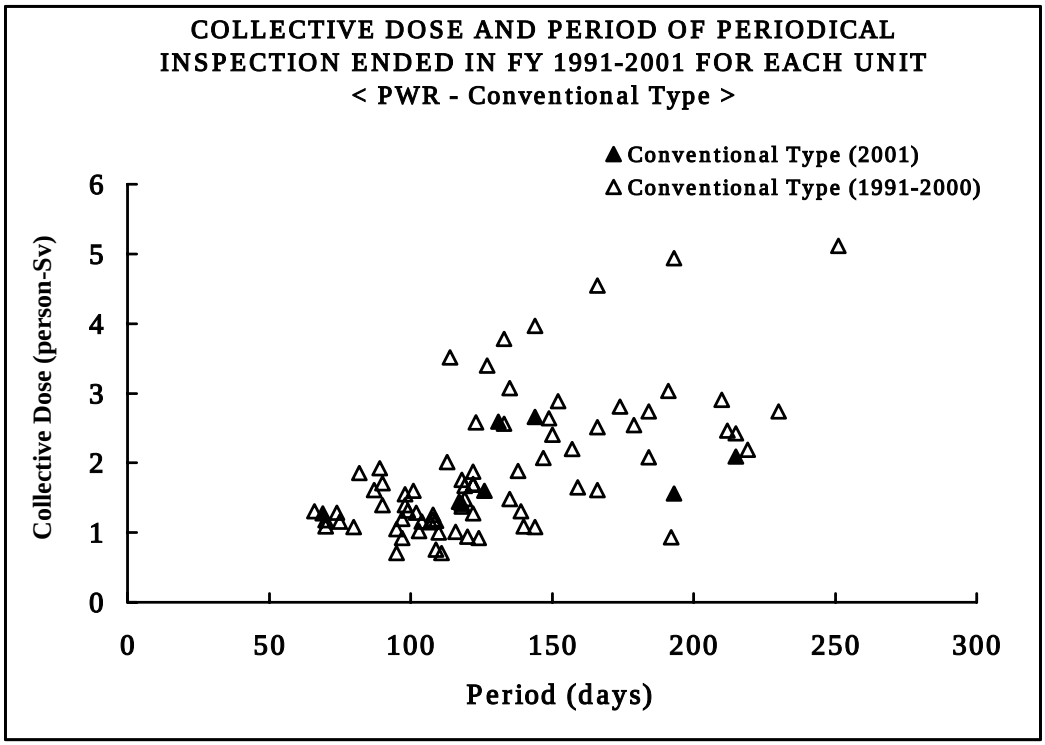

Figure 5

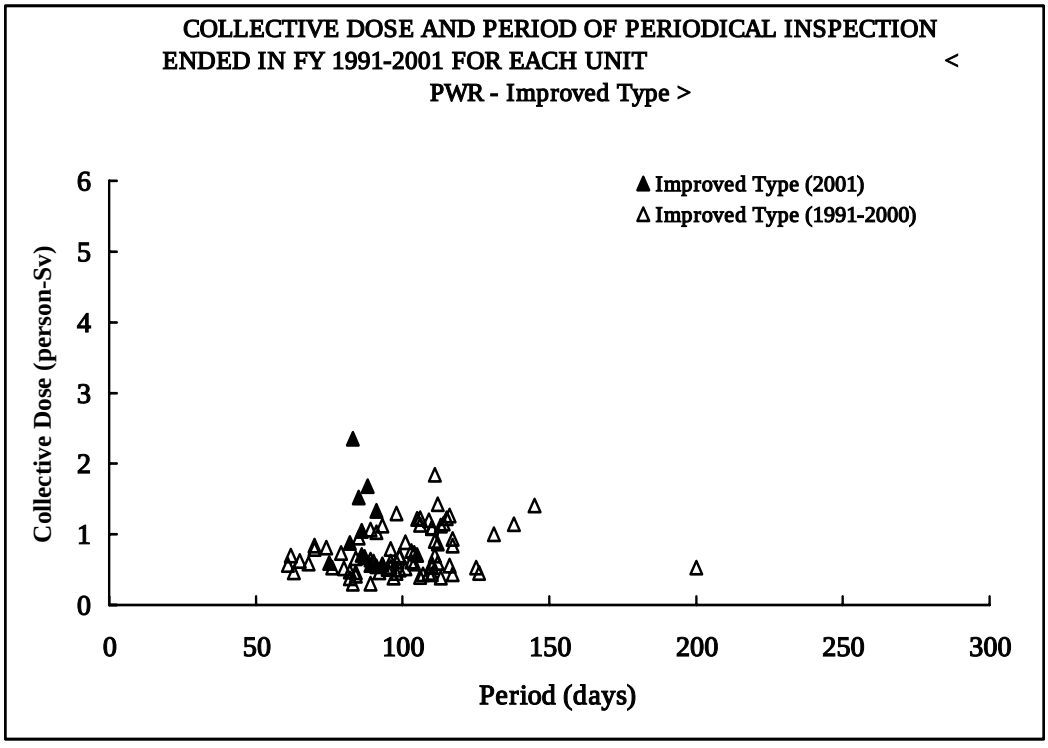

Figure 6

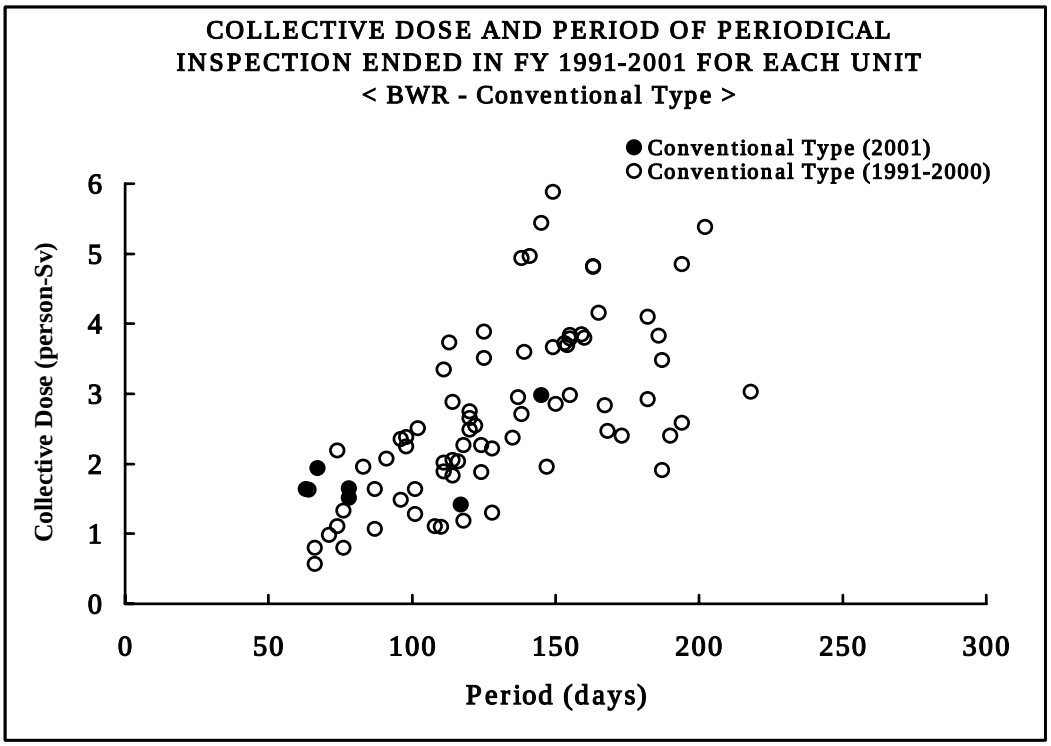

Figure 7