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ISOE INFORMATION SHEET

JAPANESE OCCUPATIONAL EXPOSURE DURING PERIODICAL INSPECTION at LWRs ENDED in FY 1994

ISOE Asian Technical Center - NUPEC Information Sheet No. 2

This ISOE information sheet presents the Japanese occupational exposure results during the periodical inspection at LWRs ended in FY 1994, and trends from FY 1986 to FY 1994 by reactor type or by Japanese plant type, i.e. Conventional type/Improved type.

Tables 1 and 2 give the average collective dose per reactor during periodical inspection ended in FY 1993 and FY 1994 for PWRs and BWRs.

The year 1994 has been marked by an improvement in dosimetric results in the Improved Type Plant. The result of BWR Comventional Type increased because of the work under the high radiation dose rate environment, for example, replacement of PLR piping, maintenace of nozzle or so.

Figures 1 to 4 show the average collective dose per reactor by reactor type and by plant type (Conventional/ Improved type) from FY 1986 to FY 1994.

The Japanese plants are listed in Tables 3 and 4 by reactor type and by plant type.

Table 1. PWRs average dose results during periodical inspection ended in FY 1993 and FY 1994

Plant type	Average coll. dose (in person-Sv)		
	FY 1993	FY 1994	
Conventional type	2.57	2.59	
Improved type	0.84	0.71	
Total PWR	1.91	1.59	

Table 2. BWRs average dose results during periodical inspection ended in FY 1993 and FY 1994

Plant type	(in per	coll. dose son-Sv) FY 1994
Conventional type Improved type	3.71 1.22	4.77 0.85
Total BWR	2.82	2.4 <u>2</u>

Figure 1 Average Dose during Periodical Inspection by
Reactor Type
(Collective Dose per Reactor)

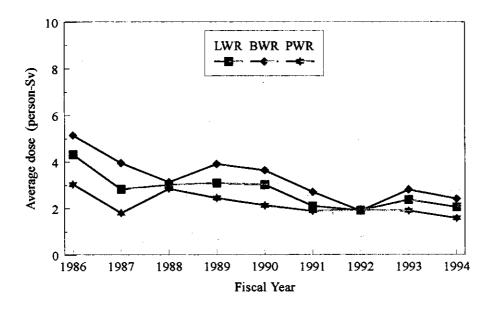


Figure 2 Average Dose during Periodical Inspection of LWR (Collective Dose per Reactor)

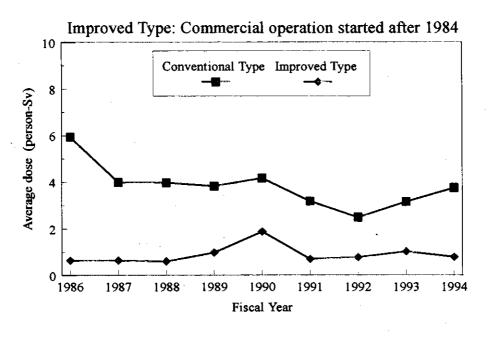


Figure 3 Average Dose during Periodical Inspection of PWR (Collective Dose per Reactor)

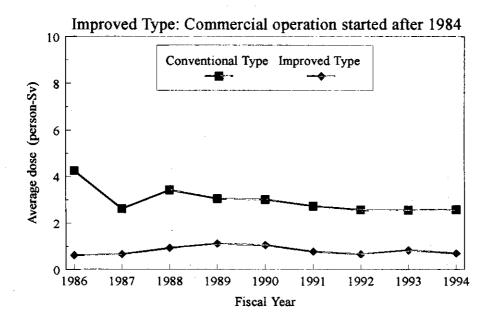


Figure 4 Average Dose during Periodical Inspection of BWR (Collective Dose per Reactor)

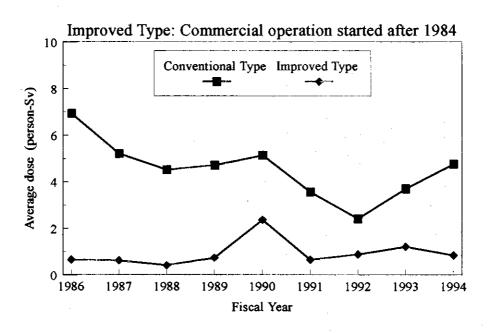


Table 3 Conventional Type of Japanese Nuclear Power Plants (As of the end of September 1995)

Plant Size	BWR	PWR
<600 MWe	Fukushima Daiichi Unit 1 (FY 1970) Hamaoka Unit 1 (FY 1975) Shimane Unit 1 (FY 1973) Tsuruga Unit 1 (FY 1969)	Mihama Unit 1 (FY 1970) Mihama Unit 2 (FY 1972) Ikata Unit 1 (FY 1977) Ikata Unit 2 (FY 1981) Genkai Unit 1 (FY 1975) Genkai Unit 2 (FY 1980)
600- 1000 MWe	Fukushima Daiichi Unit 2 (FY 1974) Fukushima Daiichi Unit 3 (FY 1975) Fukushima Daiichi Unit 4 (FY 1978) Fukushima Daiichi Unit 5 (FY 1978) Hamaoka Unit 2 (FY 1978)	Mihama Unit 3 (FY 1976) Takahama Unit 1 (FY 1974) Takahama Unit 2 (FY 1975)
>1000 MWe	Fukushima Daiichi Unit 6 (FY 1979) Fukushima Daini Unit 1 (FY 1982) Tokai Unit 2 (FY 1978)	Ohi Unit 1 (FY 1978) Ohi Unit 2 (FY 1979)
Total	12 units	11 units

Table 4 Improved Type of Japanese Nuclear Power Plants (As of the end of September 1995)

Plant Size	BWR				PWR			
<600 Mwe	Onagawa Shika	Unit 1 Unit 1		1984) 1993)	Tomari Tomari	Unit 1 Unit 2		1989) 1991)
600- 1000 MWe	Shimane Onagawa	Unit 2 Unit 2			Takahama Takahama Sendai Sendai	Unit 3 Unit 4 Unit 1 Unit 2	(FY	1984)
>1000 MWe	Fukushima Daini Fukushima Daini Fukushima Daini Kashiwazaki-Kariwa Kashiwazaki-Kariwa Kashiwazaki-Kariwa Kashiwazaki-Kariwa Kashiwazaki-Kariwa Hamaoka	Unit 3 Unit 4	(FY (FY (FY (FY (FY (FY (FY	1983) 1985) 1987) 1985) 1990) 1993) 1994) 1990) 1987) 1993)	Ohi Ohi Genkai Ikata Tsuruga	Unit 3 Unit 4 Unit 3 Unit 3 Unit 2	(FY	1991) 1992) 1993) 1994) 1986)
Total	14 un	its	* ·		11	units		

^{1.} Improved Type Plants indicate the Plants started commercial operaion in

and after Fiscal Year 1993.Figures in () indicates Fiscal Year of starting commercial Operation.