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**ISOE INFORMATION SHEET**

**JAPANESE OCCUPATIONAL EXPOSURE  
of Steam Generator Replacements**

**ISOE Asian Technical Center - NUPEC Information Sheet No. 23**

This ISOE information sheet presents an overview of the exposure of all the Steam Generator Replacements in Japan.

Japan has performed Steam Generator Replacement (SGR) in 11 units. Table 1 shows collective dose and number of personnel engaged in the work for SGR, etc.

**Table 1. Steam Generator Replacements in JAPAN**

Plant unit (No. of Planned Outage)	Days of SGR		No. of Loops Replaced	External Dosimeter	Collective dose per SGR, etc (man. Sv)			Total number of personal per SGR, etc (man. day)			Highest individual dose of planned outage (mSv)
	Start	End			Plant Personal	Outside Personal	Total	Plant Personal	Outside Personal	Total	
Mihama 2 (14 <sup>th</sup> )	1993/07/07	1994/07/07	2	Alarm Pocket Dosimeter	0.016	1.441	1.456	1,103	46,474	47,577	26.0 (SG.etc)
Takahama 2 (14 <sup>th</sup> )	1994/01/05	1994/06/14	3	Alarm Pocket Dosimeter	0.007	1.485	1.492	682	36,756	37,438	6.7 (SG.etc)
Genkai 1 (15 <sup>th</sup> )	1994/06/11	1994/09/08	2	Thermo luminescence Dosimeter	0.003	0.595	0.598	704	45,732	46,436	6.7 (SG)
Ohi 1 (12 <sup>th</sup> )	1994/09/16	1995/03/30	4	Alarm Pocket Dosimeter	0.016	2.917	2.933	725	44,775	45,500	17.7 (SG, etc)

**Table 1. Steam Generator Replacements in JAPAN (Contd.)**

Plant unit (No. of Planned Outage)	Days of SGR		No. of Loops Replaced	External Dosimeter	Collective dose per SGR, etc. (man. Sv)			Total number of personal per SGR, etc (man. day)			Highest individual dose of planned outage (mSv)
	Start	End			Plant Personal	Outside Personal	Total	Plant Personal	Outside Personal	Total	
Mihama 1 (14 <sup>th</sup> )	1994/11/01	1995/12/25	2	Alarm Pocket Dosimeter	0.006	1.103	1.109	777	42,972	43,749	25.8 (SG, etc)
Takahama 1 (16 <sup>th</sup> )	1996/01/06	1996/06/18	3	Alarm Pocket Dosimeter	0.004	1.164	1.168	463	29,413	29,876	12.9 (SG, etc)
Mihama 3 (15 <sup>th</sup> )	1996/08/27	1996/12/25	3	Alarm Pocket Dosimeter	0.003	1.271	1.274	302	24,398	24,700	17.1 (SG, etc)
Ohi 2 (13 <sup>th</sup> )	1997/02/03	1997/06/30	4	Alarm Pocket Dosimeter	0.009	1.969	1.978	536	40,127	40,663	19.0 (SG,etc)
Ikata 1 (17 <sup>th</sup> )	1998/02/05	1998/03/29	2	Alarm Pocket Dosimeter	0.009	0.914	0.923	765	18,641	19,406	12.34 (SG)
Genkai 2 (16 <sup>th</sup> )	2001/04/05	2001/07/11	2	Alarm Pocket Dosimeter	<0.01	0.87	0.88	294	19,917	20,211	12.7 (SG)
Ikata 2 (15 <sup>th</sup> )	2001/09/17	2001/11/16	2	Alarm Pocket Dosimeter	0.01	0.97	0.98	813	18,837	19,650	13.03 (SG)

\* The figure represents planned outage including SGR.