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ISOE INFORMATION SHEET

REPUBLIC OF KOREA

SUMMARY OF NATIONAL DOSIMETRIC TRENDS

ISOE Asian Technical Center - Information Sheet No. 40 (2014)

Personnel Dose Management by KHNP

For the year 2013, 23 NPPs were in operation; 19 PWR units and 4 PHWR units. The trends on the number of units are shown in Figure 1. The average collective dose per unit for the year 2013 was 527.03 man-mSv/unit (All Types); 534.76 man-mSv/unit (PWR) and 490.31 man-mSv/unit (PHWR). The trends on the average collective dose per unit are shown in Figure 2. The dominant contributors of the collective dose in the year 2013 were the works carried out during the outages, resulting in 85.2% of the total collective dose in 2013. There were 14,786 people involved in radiation works in 23 operating units and the total collective dose was 12,122 man-mSv (All Types); 10,161 man-mSv (PWR) and 1,961 man-mSv (PHWR). The trends on the total collective dose and number of workers are shown in Figure 3 and Figure 4, respectively.

The average annual individual dose in 2013 was 0.82 mSv/yr and the trend is shown in Figure 5. There was no worker exposed higher than the regulatory dose limit (100 mSv in 5 years and 50 mSv in any single year). Most of radiation workers (82.6%) received radiation dose below 1 mSv.

Rapid increase in doses during 2009 and 2010 was caused by the refurbishment (2009~2010) in Wolsong Unit 1, one of PHWRs. None of reactors were on line in 2013



Figure 1. Trends on the number of reactor units

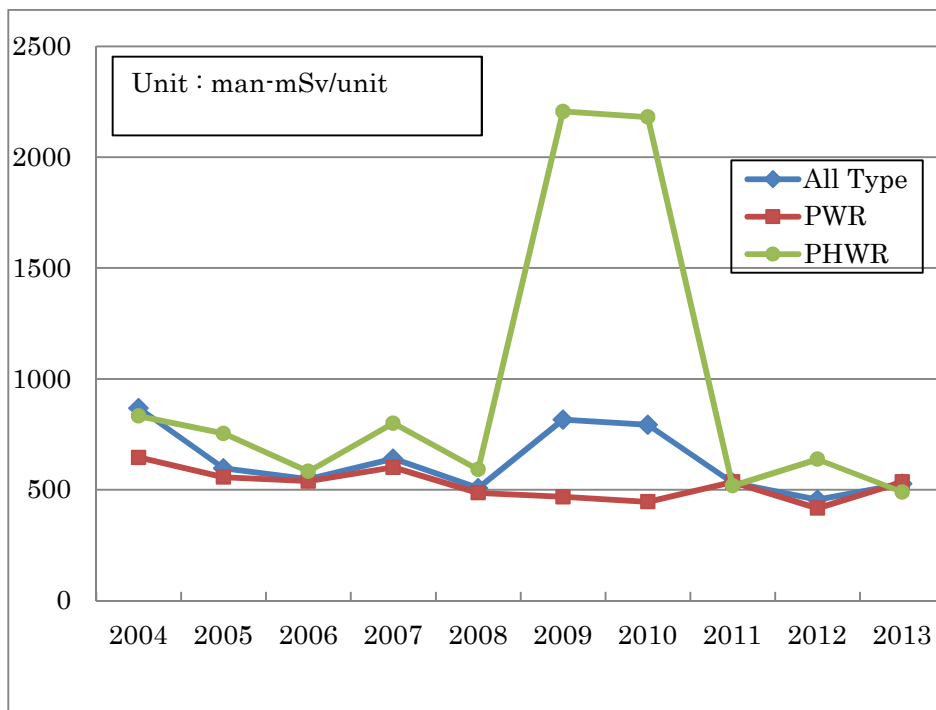


Figure 2. Trends on the average annual collective dose per unit

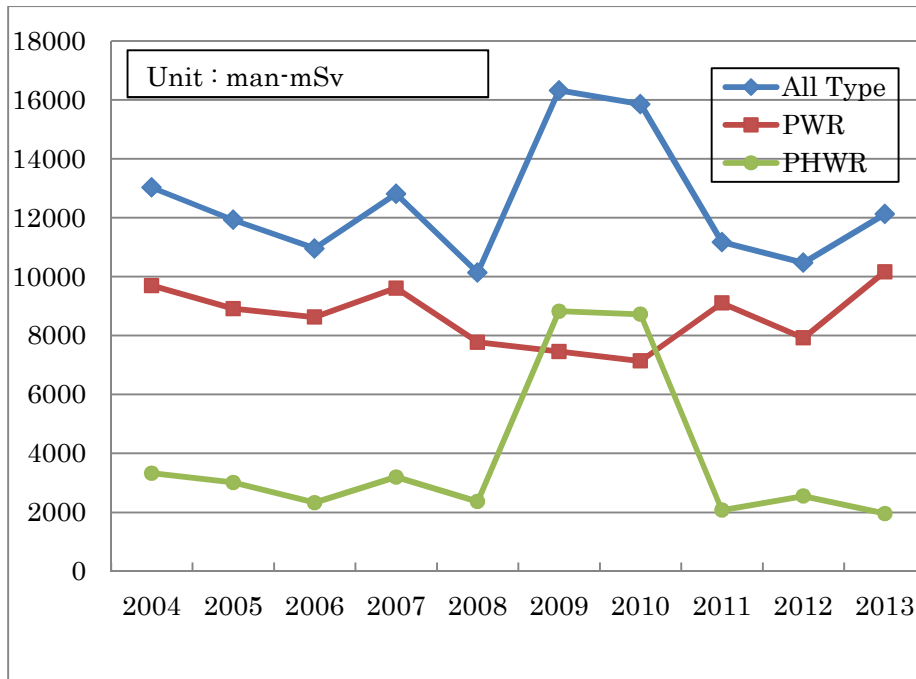


Figure 3. Trends on the total collective dose

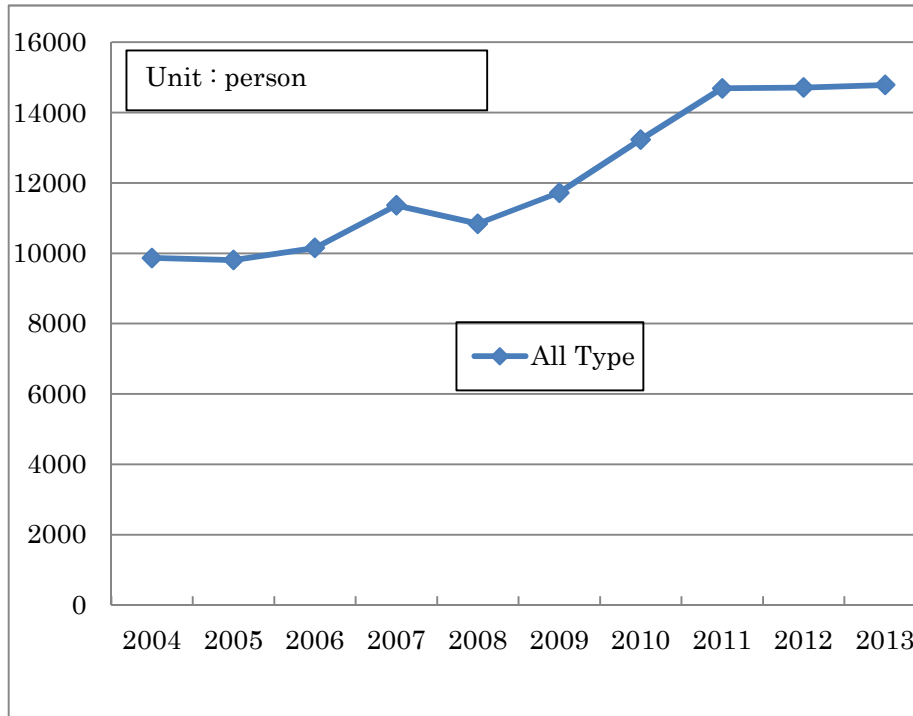


Figure 4. Trend on the number of workers

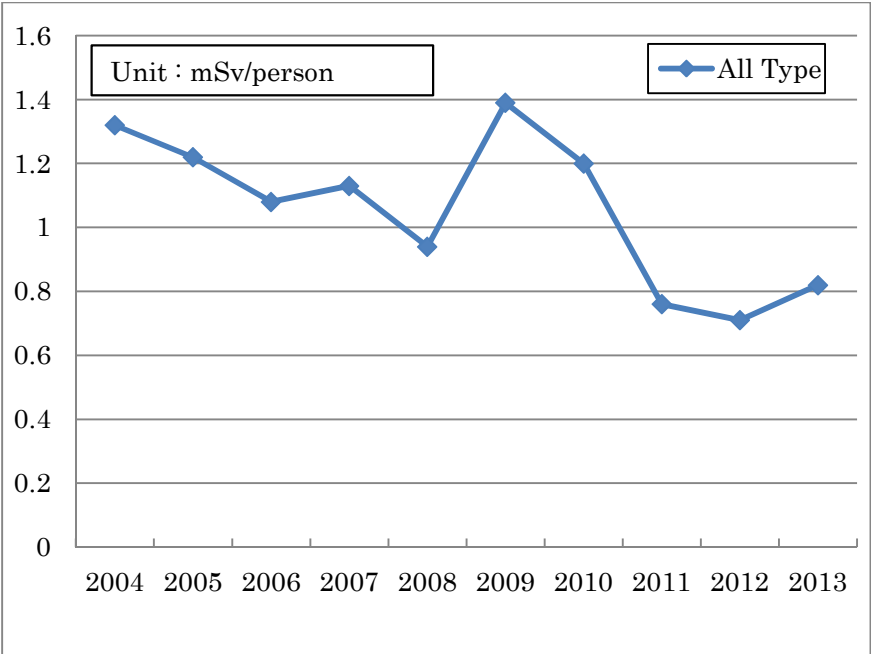


Figure 5. Trend on the average individual dose