

ISOE INFORMATION SHEET

REPUBLIC OF KOREA SUMMARY OF NATIONAL DOSIMETRIC TRENDS

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Personnel Dose Management by KHNP

For the year 2008, the total radiation dose of personnel engaged in radiation works related with the operation of 20 NPP units was 10.14 man.Sv and the average collective dose per unit was 0.51 man.Sv. In general, the total collective dose greatly depends on the outage duration for maintenance works. For the year 2008, the total collective dose was slightly lower than that of year 2007 (12.81 man.Sv) partly because outage maintenance works lasted only 461 days at 16 NPP units. However, this result is very low compared with the world average collective dose per unit and per year as seen in Figure 1, thus showing superior management capability of radiation safety control at Korean NPPs.

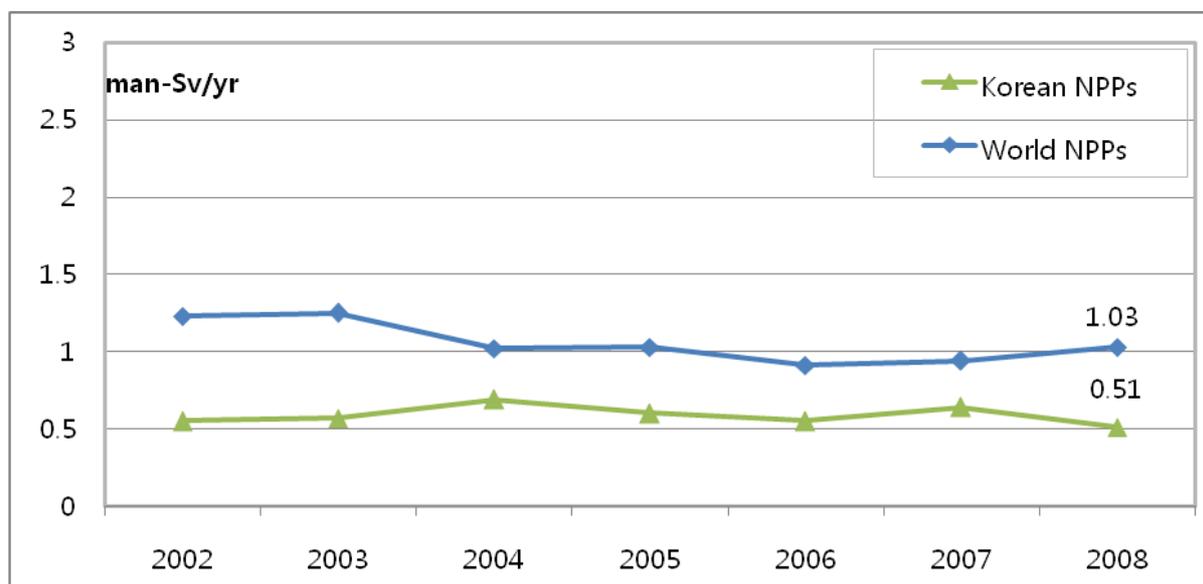


Figure 1. Trend of the average annual collective dose per unit

Meanwhile, the average annual individual dose was 0.94 mSv/yr. Unfortunately, 2 personnel at Wolsong site slightly exceeded our own dose limit of 20 mSv per year. However, most of radiation workers (79%) received radiation dose below 1 mSv. Thus, Korean NPP industry has been well adapted to the ICRP recommendations and domestic Atomic Energy Laws.

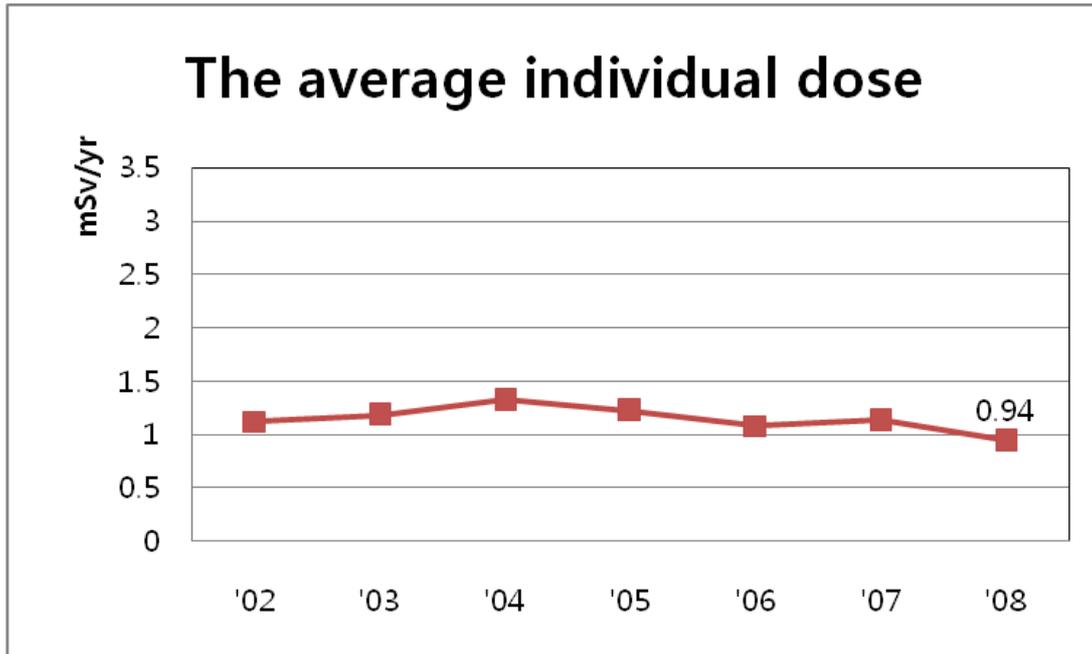


Figure 2. Evolution of the average individual dose for the period 2002-2008

Year	2002	2003	2004	2005	2006	2007	2008
Korean NPPs (mSv/yr)	1.12	1.18	1.32	1.22	1.08	1.13	0.94
Number of Radiation Workers	8,346	8,741	9,867	9,810	10,154	11,366	10,840

Table 1. Average individual dose and total number of radiation workers for the period 2002-2008

To achieve these results, KHNP established an specific plan for the overall improvement of radiation dose reduction at NPPs and has continuously made efforts to implement ALARA actions in the areas of reactor operation, improvement of maintenance/inspection facility/equipment, development of new automatic maintenance equipment and improvement of management, strategy.

However, the importance of ALARA actions is getting more and more emphasized as the radiation levels inside the NPP systems are increasing in proportion to the aging of SSCs and the increasing of maintenance works. Especially, although personnel doses are well managed below the legal dose limits, the need to reduce further worker's dose is continuous for worker's health and safety. Accordingly, KHNP has been making efforts for the reduction of personnel doses in accordance with their own third mid- and long-term dose reduction program, which was made in 2007 and is to be implemented up to the year 2016.