

Review on Radiation Area Zoning of NPPs in Korea

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Radiation area zoning of NPPs is one of radiation protection programs and plays a key role to prevent radiation workers from over-exposure and keep the exposure ALARA. Implementing radiation area zoning of NPPs should be based on requirements on radiation area in regulatory framework for regulating NPPs.

Comparisons about radiation area zoning were made for NPPs in Korea. Multi stages for radiation area zoning (i.e. Zone 1~6) were applied based on the radiation levels. By the way, detailed values of zoning ranges of radiation area are various, especially even in the first zone (i.e. Zone 1). Although the zoning ranges are various, the zonings agree with the related regulation.

IAEA IRRS taken to review the nuclear regulatory system of Korea in December 2014 had recommended that the concept of supervised areas should be introduced to the regulatory framework in addition to the currently implemented radiation area, i.e. controlled areas. Based on this review, it seems that even if the concept of supervised areas be implemented in Korea, current radiation zoning of NPPs could accept the concept of supervised areas via only a few modifications in radiation zoning and the modifications of zoning would not affect the overall system of radiation protection programs in NPPs.

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