ICRP Recommendations and Responses of the **Dose Limits** Japanese Government Responses at the time of the accident at Tokyo Electric Power 2007 Recommendations of the ICRP Company (TEPCO)'s Fukushima Daiichi NPS Special Provisions of the Ordinance on Rescue activities When benefits for other Prevention of Ionizing Radiation Hazards (Volunteers who have people outweigh the obtained the relevant rescuers' risks, dose limits (Ministry of Health, Labour and Welfare) information) are not applied. The emergency exposure dose limit was temporarily raised to 250 mSv from the Occupational conventional level of 100 mSv (from March exposure 14 to December 16, 2011). 1.000 mSv or 500 mSv Other emergency The Ordinance on Prevention of Ionizing activities Radiation Hazards was partially amended to raise the exceptional emergency dose limit to 250 mSv (enforced on April 1, 2016). The limit is to be set within Emergency exposure the range of 20 to 100 Standards for evacuation in Deliberate situations Evacuation Areas: 20 mSv/year **Public** mSv/year. exposure Reconstruction period The limit is to be set within (Existing exposure the range of 1 to 20 Additional exposure dose to be achieved in situations) mSv/year. the long term: 1 mSv/year Source: Prepared based on the 2007 Recommendations of the ICRP and the Special Provisions of the Ordinance mSv: millisieverts on Prevention of Ionizing Radiation Hazards (Ministry of Health, Labour and Welfare: MHLW)

The accident at TEPCO's Fukushima Daiichi NPS occurred while deliberations were continuing over the incorporation of the 2007 Recommendations of the ICRP into domestic laws and regulations.

The accident changed exposure situations, and the idea of reference levels, which had been unfamiliar to Japanese laws and regulations, was adopted for public exposure. In exposure dose control using reference levels, an initial reference level is first set based on the standards for respective exposure situations specified in the 2007 Recommendations of the ICRP so as to ensure that no one receives an unduly high dose. Secondly, if the situation has improved and there is almost no one who receives a high dose exceeding the reference level, a new lower reference level is set as necessary to efficiently achieve exposure dose reduction.

In the meantime, regarding occupational exposure, the emergency dose limit was temporarily raised from 100 mSv to 250 mSv as an exception for an unavoidable case for the purpose of preventing the expansion of the disaster at the NPS. Later, as the work to achieve stable cold shut-down conditions of the reactors was completed, this exceptional measure was abandoned.

Considering the need to develop regulations on the prevention of radiation hazards during emergency work in preparation for any possible nuclear emergencies at nuclear facilities in the future, the Ordinance on Prevention of Ionizing Radiation Hazards was partially amended to raise the exceptional emergency dose limit to 250 mSv. The amended Ordinance was put into force on April 1, 2016.

(Related to p.168 of Vol. 1, "Reduction of Exposure Doses Using Reference Levels")

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