

## **Section 2 Nuclear Disaster Countermeasures from the Nuclear Regulation Authority**

Based on the lessons learned from the accident at the Tokyo Electric Power Company's Fukushima Daiichi Nuclear Power Station, it is extremely important to continue efforts to ensure trust in the nuclear regulatory authority. In order to fulfill its mission of protecting people and the environment through reliable regulation of nuclear energy, the Nuclear Regulation Authority (NRA) has been working on various policy issues under the organizational principles of "independent decision-making," "effective action," "transparent and open organization," "ambition and sense of responsibility," and "immediate response to emergencies."

### **2-1 Measures for Nuclear Disaster Prevention**

The Nuclear Regulation Authority (NRA) has been working to improve the Nuclear Disaster Risk Management Measures to ensure that the decision criteria used in disaster prevention planning are always the most appropriate, for example by actively incorporating the latest international knowledge. Based on the review of the Emergency Action Level (EAL), which determines whether or not a nuclear operator is in an emergency situation, approved at the FY 2019 75th meeting of the Nuclear Regulation Authority (NRA) on March 30, 2020, a "Meeting on Response to the Review of the Emergency Action Level" was held 3 times to exchange opinions with nuclear operators on the review of the EAL considering specific major accident response facilities and diversity expansion facilities. Based on the results of these meetings, the Nuclear Regulation Authority decided to revise the guidelines and related regulations at the 35th meeting of the Nuclear Regulation Authority in FY 2020 (October 28, 2020).

Work is being performed to promote the steady development of medical systems in the event of a nuclear disaster, including support for the promotion of the designation of Nuclear Emergency Core Hospitals.

### **2-2 Measures for Emergency Response**

In FY 2020, the Nuclear Regulation Authority (NRA) presented an annual training plan to emergency response personnel to strengthen their emergency response capability, and also prepared an ability improvement sheet for each functional group, and used this improvement sheet for personnel evaluation, as in the previous year. This has strengthened the competence management system for each staff member.

In addition, drills were conducted in conjunction with the nuclear operators' disaster preparedness drill to improve emergency response capabilities, for example, by pursuing smoother information sharing between the Secretariat of the NRA's Emergency Response Center (ERC) and the rapid response centers at nuclear facilities of nuclear operators.

In addition, the evaluation results of the emergency drills for nuclear operators, which were conducted at each site of power plants and nuclear fuel facilities, were reported at the FY 2020 Nuclear Operators' Disaster Prevention Drill Report Debriefing Session. Besides, based on the training scenarios prepared in FY 2019, the Working Group for Developing Training Scenarios established under the Nuclear Operators' Disaster Prevention Drill Report Debriefing Session conducted training to improve the decision-making capability of commanders at eight nuclear operators and training to improve the response capability at eight nuclear operators. Based on the results of the training, a training scenario was developed based on the FY 2020 training implementation policy.

### **2-3 Measures for Emergency Monitoring**

The Nuclear Regulation Authority (NRA) has established "Emergency Monitoring Centers" in all areas where nuclear facilities are located in order to conduct effective emergency monitoring based on the Nuclear Disaster Risk Management Measures. As for the emergency monitoring centers in each region, the necessary materials and equipment are being maintained to ensure that they can function reliably in the event of a nuclear disaster. Furthermore, the emergency monitoring system is being enhanced and strengthened by assigning radiation monitoring staff to the NRA regional offices.

The results of emergency radiation monitoring collected by the "Emergency Radiation Monitoring Information Sharing/ Announcement System" were to be published on the website of the Nuclear Regulation Authority (NRA) at the stage of notification based on Article 10, Paragraph 1 of the "Act on Special Measures Concerning Nuclear Emergency Preparedness." However, at the 10th Nuclear Regulation Authority (NRA) meeting held on May 29, 2019, the NRA decided to publish the estimated values from ordinary times in order to contribute to the smooth communication of information to the public in an emergency. A new "Radiation Monitoring Information Sharing/ Announcement System" was developed, and its operation started in March 2021.

### **2-4 Accidents/ Breakdowns**

The "Act on the Regulation of Nuclear Source Material, Nuclear Fuel Material, and Reactors" obliges nuclear operators, and the "Act on the Regulation of concerning Prevention from Radiation Hazards due to Radioisotopes, etc." obliges licensed and registered users to report accidents and malfunctions to the Nuclear Regulation Authority (NRA). In FY 2020, 4 reports were received from nuclear operators under the "Act on the Regulation of Nuclear Source Material, Nuclear Fuel Material, and Reactors" and 3 reports were received from users with a license/notification under the "Act on the Regulation of concerning Prevention from Radiation Hazards due to Radioisotopes, etc."