

Section 3: Enhancing and Strengthening Local Nuclear Emergency Preparedness Systems

3-1 Formulating and Supporting Local Plans for Disaster Risk Reduction / Evacuation Plans

Under the Basic Act on Disaster Management, local governments must prepare Local Plans for Disaster Risk Reduction with Nuclear Emergency Response Measures (hereinafter “Local Plans for Disaster Risk Reduction”) that set out the basic response to be adopted by prefectures and municipalities in dealing with a nuclear emergency.

Currently, related local governments within a radius of around 30km of a nuclear power plant are preparing Local Plans for Disaster Risk Reduction based on the Basic Plan for Disaster Risk Reduction and the Nuclear Emergency Response Guidelines (Fig. 3-1-1). Ensuring that the content of Local Plans for Disaster Risk Reduction is highly specific and effective is crucial, so the government provides proactive support regarding measures to tackle issues that are difficult for local governments alone to resolve in developing more specific Evacuation Plans and measures to assist persons requiring special care.

Fig. 3-1-1 Status of Local Plans for Disaster Risk Reduction / Evacuation Plans (as of March 31, 2019)

	Municipalities Concerned	Number of Local Plans for Disaster Risk Reduction Formulated	Number of Evacuation Plans Formulated	Remarks
Tomari region	13	13	13	
Higashidori region	5	5	5	
Onagawa region	7	7	7	
Fukushima region*	13	11	9	In December 2016, Fukushima Prefecture revised the Fukushima Prefecture Region-wide Evacuation Plan in Case of Nuclear Emergency.
Kashiwazaki-Kariwa region	9	9	9	
Tokai region	14	13	3	In March 2015, Ibaraki Prefecture formulated the Plan for Region-wide Evacuation in Ibaraki Prefecture in Case of a Nuclear Emergency.
Hamaoka region	11	11	7	In March 2017, Shizuoka Prefecture revised the Plan for Region-wide Evacuation in Case of a Nuclear Emergency in the Hamaoka region.
Shika region	9	9	9	
Fukui area	23	23	23	
Shimane region	6	6	6	
Ikata region	8	8	8	
Genkai region	8	8	8	
Sendai region	9	9	9	
Total for the 13 regions	135	132	116	

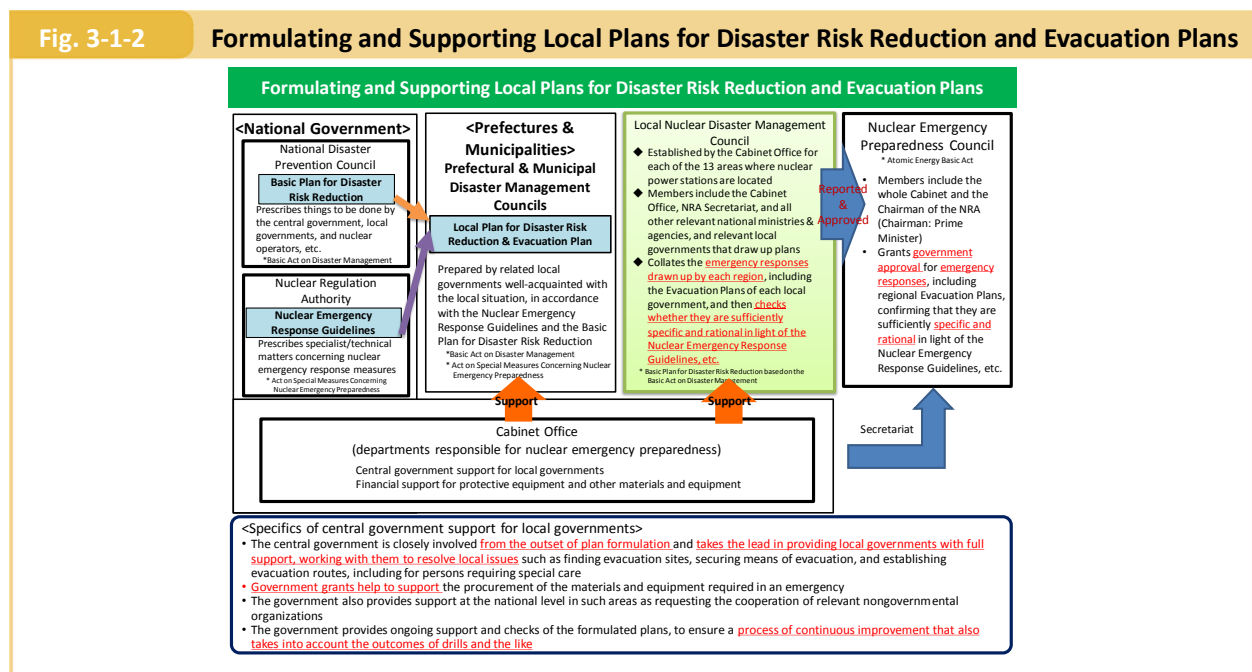
Note: * Readers should be aware that Tokyo Electric Power Company's Fukushima Daiichi Nuclear Power Station, which is a Specified Nuclear Facility, is located in the Fukushima region and that the area around it is an evacuation instruction area.

Source: Cabinet Office

In March 2015, the Cabinet Office established Local Nuclear Disaster Management Councils (hereinafter “Management Councils”) to serve as working teams for resolving issues in areas where nuclear power plants are located. Its aim in doing so was to support efforts to flesh out and enhance the content of the Local Plans for Disaster Risk Reduction and Evacuation Plans formulated by prefectures and municipalities in accordance with “Future Responses to Enhancing Local Plans for Disaster Risk Reduction” (approved by the Nuclear Emergency Preparedness Council in September 2013). The Cabinet Office also established working groups reporting to these Management Councils. The working groups in each region are considering support and region-wide coordination in the formulation of Evacuation Plans, and the assistance provided by national frontline response organizations, while the national government and related local governments are working

together to develop more specific, enhanced Local Plans for Disaster Risk Reduction and Evacuation Plans (Fig. 3-1-2).

Areas where more specific, enhanced Local Plans for Disaster Risk Reduction and Evacuation Plans have been developed must summarize their emergency response including evacuation plans and have it confirmed by the Management Councils, to ensure that it is specific and rational. The Cabinet Office then reports the councils' findings to the Nuclear Emergency Preparedness Council, to seek the Council's approval. A PDCA review cycle is introduced for regions whose emergency response has been confirmed: in addition to support for enhancing the emergency response and making it more specific, followed by confirmed of the emergency response (Plan), a drill is carried out by the Management Council based on the confirmed emergency response (Do), areas for improvement are identified from the outcomes of the drill (Confirm), and the emergency response of the region in question is improved on the basis of those areas for improvement (Action). Thus, the local nuclear emergency preparedness system goes through an ongoing process of enhancement and strengthening.

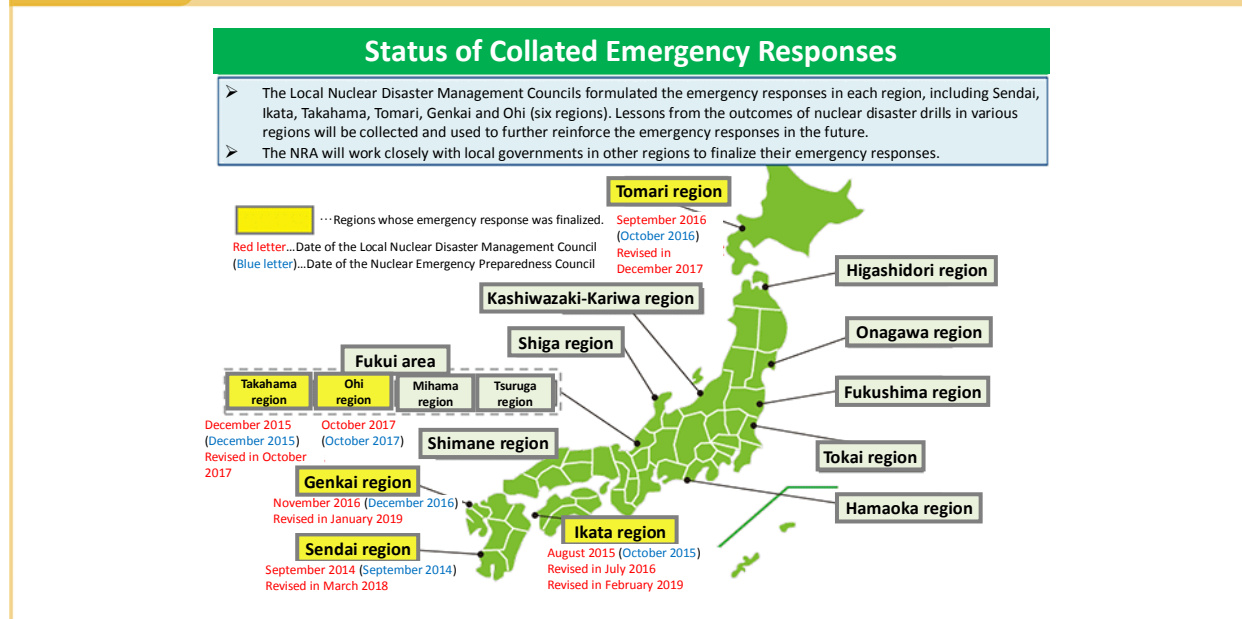


Source: Cabinet Office

In FY2018, the Genkai Local Nuclear Disaster Management Council amended the Genkai Region Emergency Response in its 2nd meeting, while the Ikata Local Nuclear Disaster Management Council amended the Ikata Region Emergency Response in its 3rd meeting (Fig. 3-1-3).

Fig. 3-1-3

Status of Collated Emergency Response



Source: Cabinet Office

A subcommittee will be set up in each of the Tsuruga, Mihama, Ohi and Takahama regions in the Fukui area to discuss how best to solve issues specific to each region.

(1) Genkai region

The Genkai Local Nuclear Disaster Management Council reviewed the Genkai Region Emergency Response in November 2018, and reported the results of the review and approved said Emergency Response in December 2018. In September 2017, a National Comprehensive Nuclear Emergency Response Exercise was held in order to verify the effectiveness of the above Emergency Response. Subsequently, in order to further concretize and enhance the Emergency Response based on the lessons learned from the exercise pointed out in the Report on the Findings from the Comprehensive Nuclear Emergency Response Exercise that came out in March 2018, the Genkai Local Nuclear Disaster Management Council amended the Genkai Region Emergency Response in its second meeting on January 9, 2019.

Reference: https://www8.cao.go.jp/genshiryoku_bousai/keikaku/02_genkai.html

The key changes to the Genkai Region Emergency Response are as follows:

- Clarification of the bus evacuation routes for people who need special care in the event of a site area emergency;
- Designation of multiple transfer airports for the emergency delivery of personnel and relief supplies by the national government;
- Concretization of the ideas of response measures in a scenario where indoor evacuation becomes impossible due to a complex disaster involving an earthquake, etc.; and
- Enhancement of evacuation monitoring measures and traffic congestion measures using the video transmission system of helicopters.

Other changes included: (1) clarification of response measures for tourists and temporary visitors; (2) enhancement of the medical system in the case of a nuclear disaster; (3) increasing the stock of stable iodine

agents; and (4) clarification of response measures for Unit 1 of the Genkai Nuclear Power Plant, for which a decommissioning plan pursuant to the Act on the Regulation of Nuclear Source Material, Nuclear Fuel Material and Reactors has been approved and which is subject to the scope of the public notice on fuel cooling (those specified by the NRA in the public notice as nuclear power generation facilities in which irradiated fuel assemblies have been cooled for a sufficient period of time).

At the second meeting of the Genkai Local Nuclear Disaster Management Council, Saga, Nagasaki, and Fukuoka Prefectures shared a view that there would be neither end to nuclear disaster preparedness efforts nor such thing as a perfect nuclear disaster preparedness plan, while other participants pointed out the need for establishing a collaborative system to ensure smooth evacuation in the event of a complex disaster. The Local Council also announced its intention to continue the efforts to enhance the effectiveness of nuclear disaster preparedness measures by conducting exercises based on the amended Emergency Response, while also striving to promote the public understanding for nuclear disaster preparedness through drills and distribution of booklets. The national government announced its intention to continue to conduct exercises under cooperation with the Genkai Local Nuclear Disaster Management Council, while also working with the relevant local governments in further concretizing and enhancing the Genkai Region Emergency Response, keeping in mind the results of the drills. Through the above process, the Genkai Local Nuclear Disaster Management Council confirmed in its meeting that the above amendment was aimed at the further concretization and enhancement of the Emergency Response based on the lessons learned through the Comprehensive Nuclear Emergency Response Exercises in FY2017.

(2) Ikata region

In the Ikata region, the Ikata Local Nuclear Disaster Management Council finalized the Ikata Region Emergency Response in August 2015; the report confirming the final outcome was submitted to and approved by the Nuclear Emergency Preparedness Council in October that year. In November the same year, a National Comprehensive Nuclear Emergency Response Exercise was held to verify the effectiveness of the Emergency Response. In July 2016, the Ikata Region Emergency Response was amended based on the lessons learned through the exercise. Subsequently, in order to further enhance the effectiveness of the Emergency Response, Ehime Prefecture Nuclear Emergency Response Exercises were held in September and November 2016, November 2017, and October 2018. The Ikata Local Nuclear Disaster Management Council amended the Ikata Region Emergency Response in its third meeting held on February 12, 2019 in order to further concretize and enhance the Emergency Response based on the lessons learned through the above exercises.

Reference: https://www8.cao.go.jp/genshiryoku_bousai/keikaku/02_ikata.html

The key changes to the Ikata Region Emergency Response are as follows:

- (i) Enhancement of the system to collect information on evacuation routes using drones in the PAZ (Precautionary Action Zones: Areas where precautionary measures are in place; within a radius of approximately 5 km from the nuclear power generation facility) and PEA (Precautionary Evacuation Areas: Areas in which evacuation and other protective measures similar to those for PAZ are in place);
- (ii) Development of an information sharing system with Oita Prefecture, which is a potential marine evacuation destination for the residents of the PEAs;
- (iii) Clarification of marine and air evacuation routes, destinations, and means for when land evacuation from the PEAs is difficult; and
- (iv) Clarification of protective measures in the event of a complex disaster involving a typhoon, earthquake, etc.

Other changes included: (1) enhancement of the capability of temporary disaster information broadcasting stations for communicating information to the residents; (2) enhancement of the medical system in the case of a nuclear disaster; (3) increasing the stock of stable iodine agents; and (4) clarification response measures for Unit 1 of the Ikata Nuclear Power Plant, for which a decommissioning plan pursuant to the Act on the Regulation of Nuclear Source Material, Nuclear Fuel Material and Reactors has been approved and which is subject to the scope of the public notice on fuel cooling.

At the third meeting of the Ikata Local Nuclear Disaster Management Council, the members shared an understanding that there would be no end to nuclear disaster preparedness efforts. Ehime Prefecture announced that it would create an educational DVD on region-wide evacuation for use in seminars and streaming to promote the understanding of the residents, while also promoting more practical exercises and the use of drones. In addition, Ehime, Yamaguchi, and Oita Prefectures expressed their intention to work with relevant municipalities and disaster prevention organizations in enhancing and strengthening nuclear disaster preparedness measures. The national government announced its intention to continue to conduct exercises under cooperation with the Ikata Local Nuclear Disaster Management Council, while also working with the relevant local governments in further concretizing and enhancing the Ikata Region Emergency Response, keeping in mind the results of the drills.

Through the above process, the Ikata Local Nuclear Disaster Management Council confirmed in its meeting that the above amendment was aimed at the further concretization and enhancement of the Emergency Response based on the lessons learned through the Ehime Prefecture Nuclear Emergency Response Exercises.

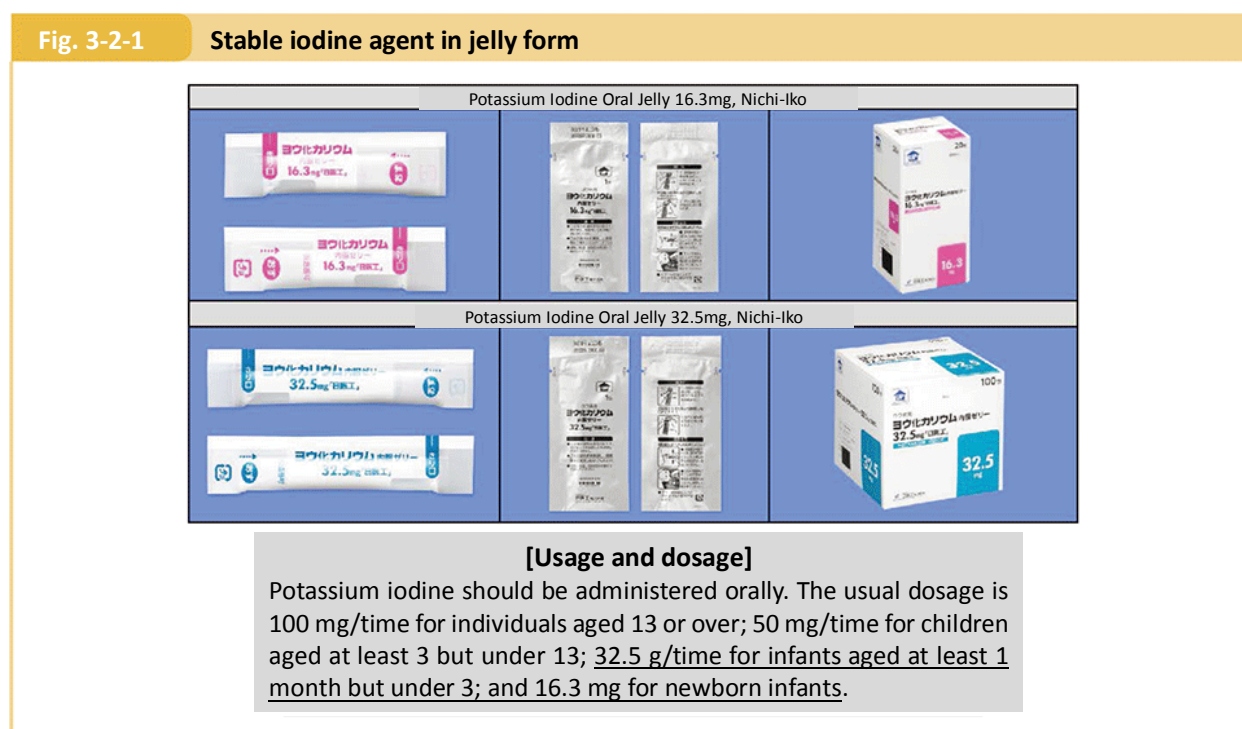
3-2 Support and Initiatives for Other Prefectures

(1) Stockpiling and Distribution of a Stable Iodine Agent in Jelly Form

Stable iodine agents in pill form are not suitable for infants and young children (aged under three) because their swallowing ability is not fully developed by that stage. In an emergency, a pharmacist or other trained person has to administer a powdered stable iodine agent dissolved in syrup. For this reason, agents suitable for such children could not be distributed in advance, which had been a major issue.

In March 2016, the manufacturer of the pills developed a prepackaged product consisting of the active ingredient (potassium iodide) dissolved in a jelly. Accordingly, local governments in the PAZ and UPZ (Urgent Protective Action Planning Zone: Areas in which urgent protective measures are in place; within a radius of approximately 5 to 30 km from the nuclear power generation facility) stockpiled stable iodine agents in jelly form and distributed them to residents in advance with financial support by the national government. The necessary amount had been stocked by the end of FY2018 (Fig. 3-2-1).

In addition, the manufacturer announced that the expiration of potassium iodide pills (50 mg) shipped from April 1, 2019 onward would be extended from three years to five years.



Source: Provided by the pharmaceutical manufacturer

(2) Designation of Off-site Centers

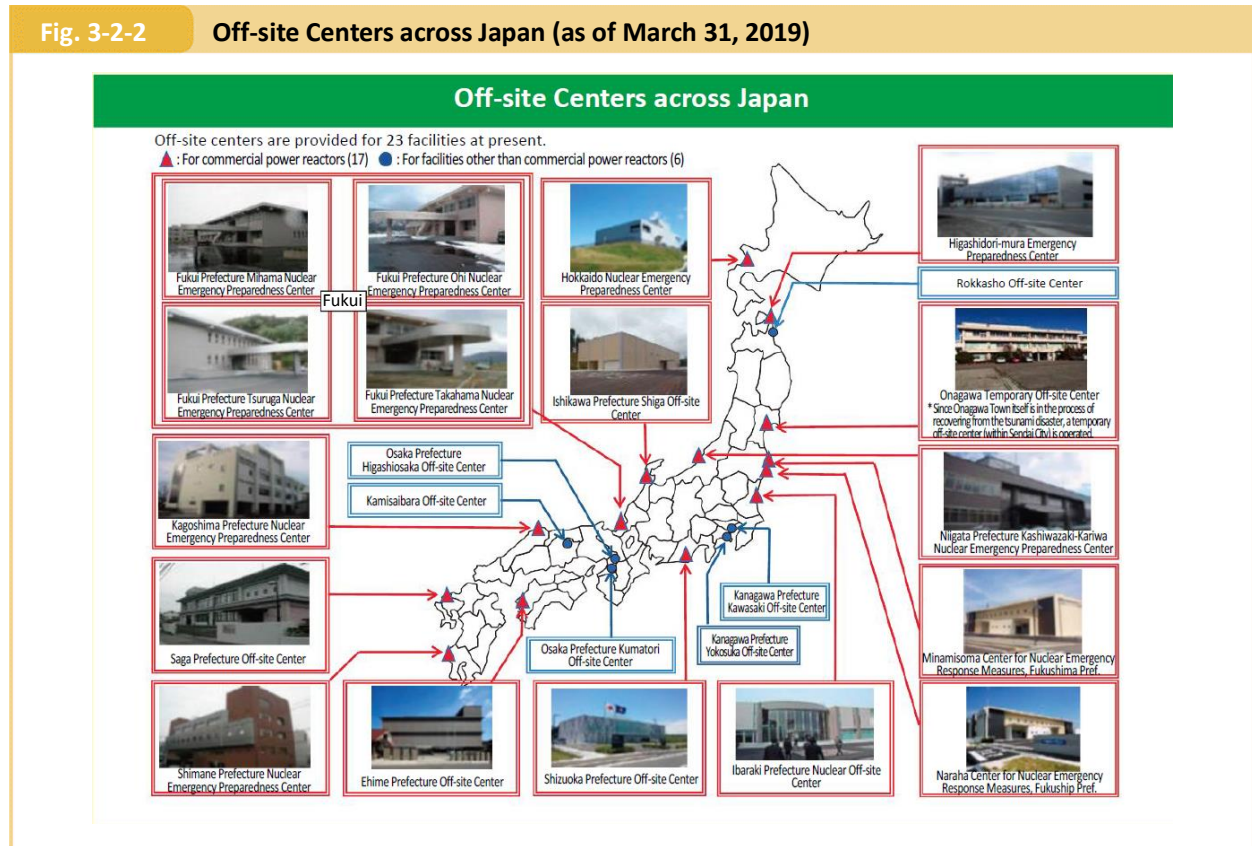
Under Article 12 (1) of the Act on Special Measures Concerning Nuclear Emergency Preparedness, the Prime Minister is required to designate an emergency response base facility (known as “an off-site center”) for each nuclear site, for the coordination of emergency response measures (Fig. 3-2-2).

The requirements that off-site centers must satisfy are prescribed in the Cabinet Office Ordinance on Off-site Centers Pursuant to the Act on Special Measures Concerning Nuclear Emergency Preparedness. Based on

the lessons from the accident at Fukushima Daiichi Nuclear Power Station, the siting requirements for the off-site centers of commercial power reactors were revised in September 2012 to be within a radius of 5 - 30 km from the power station in principle (i.e. within the UPZ).

Since the former Onagawa Off-site Center had been damaged by tsunamis in the Great East Japan Earthquake, a Fire Academy in Sendai City had been designated as a temporary off-site center for the Onagawa region, but a new site was decided in Onagawa Town and construction of a new off-site center started in FY2017.

Fig. 3-2-2 Off-site Centers across Japan (as of March 31, 2019)



Source: Cabinet Office

(3) Enhancing Nuclear Emergency Response Measures

At a meeting of the Inter-Ministerial Council for Nuclear Power in March 2016, a document concerning nuclear energy policy, entitled the “Stance on Enhancing Nuclear Emergency Response Measures,” was put together at the request of the National Governors’ Association, in response to calls from local governments in charge of local resilience. The Committee of Related Ministries and Agencies on Nuclear Emergency Response Measures was convened in April 2016 to facilitate a government-wide effort to enhance nuclear emergency response measures in light of this stance. At this meeting, committee members decided to establish subcommittees focused on three themes: cooperation between front-line response units (No. 1 Subcommittee), cooperation between private sector business operators (No. 2 Subcommittee), and approaches to the provision of information, including diffusion calculations (No. 3 Subcommittee). Each subcommittee was engaged in professional and practical deliberations that take into account the views of local governments while cooperating with related ministries and agencies. The outcomes were reported at the Inter-Ministerial Council for Nuclear Power, etc. (Fig. 3-2-3)

Fig. 3-2-3

Key Points of Study Results at the Subcommittee for Enhancing Nuclear Emergency Response Measures

Key Points of Study Results at the Subcommittee for Enhancing Nuclear Emergency Response Measures		
The following recommendations by the National Governors' Association were put together in addition to the Stance on Enhancing Nuclear Emergency Response Measures (decided on March 11, 2016 at the Inter-Ministerial Council for Nuclear Power):		
1. Cooperation between front-line response organizations	2. Cooperation agreements with private business operators	3. Approaches to the provision of information
(1) Activities of these organizations should be <u>presented with actual examples, and emergency responses clearly indicated by the community.</u> (Example activities) - Police: Guiding vehicles carrying personnel dispatched to affected areas - Firefighters: Supporting transport of those who require assistance evacuating - Japan Coast Guard: Supporting the evacuation of residents by patrol boats - SDF: Supporting evacuation (2) <u>Initiatives such as the sharing of information and exchange of views should be promoted through community liaison conferences^{*1} during normal times.</u> (3) <u>The system of a joint operations coordination center^{*2} should be used according to discussion among stakeholders in the event of an unforeseen situation in the nuclear disaster.</u> (4) <u>Cooperation should be ensured by the community taking advantage of the features of each organization.</u> ^{*1} Community liaison conference A conference comprising related ministries and agencies (including front-line organizations) and nuclear operators to coordinate collaboration in emergency responses and support of the nuclear site. ^{*2} Joint operations coordination center Front-line response units organized each time a disaster takes place share information at this center as required.	(1) <u>Provisions to be included in the agreement between the local government and private business operator will be collated and presented.</u> (Example provisions) ● Setting of measures to manage exposure doses and decision on an exposure dose management method for conducting tasks. ● Better understanding of preparation for materials and equipment such as protective clothing and masks by the local government and dissemination of methods and procedures for distributing these materials and equipment. ● The local government will bear and compensate the cost required for conducting tasks and the loss caused by conducting tasks in principle. ● Regular training opportunities will be provided for private business operators who actually engage in the work.	(1) If the risk of fatalities directly caused by natural disasters (earthquakes, tsunamis, heavy snowfall) is extremely high, <u>evacuation actions for natural disasters will be prioritized over that for nuclear disasters.</u> (2) <u>Awareness of residents and private business operators will be raised regarding complete adherence to sheltering indoors and evacuation information will be provided to residents via various tools, including a prefectural/municipal disaster management radio communication system.</u> (3) About the diffusion calculation: ● <u>Details of support (e.g. execution of calculation and explanation of results) will be made clear as pre-disaster measures to enhance evacuation plans.</u> ● <u>The points to note will be collated for local governments to make decisions and take responsibilities during an emergency.</u>

Source: Cabinet Office

3-3 Training and Seminars on Regional Nuclear Emergency Preparedness

(1) Support for Nuclear Emergency Preparedness Drills Conducted by Local Governments

Under the Basic Act on Disaster Management, etc., local governments are required to hold a nuclear emergency preparedness drill on a regular basis. Drills organized by related prefectural governments are carried out with the participation of prefectural governors and local governments, as well as national and regional front-line response organizations, namely the police, firefighters, the Japan Coast Guard, and the Self-Defense Forces. They include exercises in evacuating local citizens and conducting inspections when evacuating each

area (Fig. 3-3-1).

In regions where the Local Plan for Disaster Risk Reduction and Evacuation Plan have been enhanced and made more specific, each Local Nuclear Disaster Management Council provides the necessary support in such areas as planning and implementing the drills, promoting the widespread use of evaluation methods, and operating the PDCA cycle via the drills, with the goal of verifying the specificity and effectiveness of the Local Plans for Disaster Risk Reduction and Evacuation Plan.

The Cabinet Office formulated the Guidance for Planning, Implementing and Evaluating Emergency Preparedness Drills in March 2018 as basic guidance for the prefectures which operate the entire drills from planning, implementation to evaluation.

Reference: https://www8.cao.go.jp/genshiryoku_bousai/kunren/kunren.html

Fig. 3-3-1

Nuclear Emergency Response Exercises Held by Local Governments in FY2018

Region	Name of Drill	Date
Tomari	Hokkaido Nuclear Emergency Response Exercise	October 22, 2018 and February 4, 2019
Higashidori	Aomori Prefecture Nuclear Emergency Response Exercise	November 10 and 11, 2018
Onagawa	Miyagi Prefecture Nuclear Emergency Response Exercise	January 24, 2019
Fukushima	Fukushima Prefecture Nuclear Emergency Response Exercise	January 21 and 26, 2019
Shika	Ishikawa Prefecture Nuclear Emergency Response Exercise Toyama Prefecture Nuclear Emergency Response Exercise	November 11, 2018
Fukui	(i) Fukui Prefecture Nuclear Emergency Response Exercise (ii) Kyoto Prefecture Nuclear Emergency Response Exercise (iii) Shiga Prefecture Nuclear Emergency Response Exercise ((i) to (iii) are conducted as part of the National Comprehensive Nuclear Emergency Response Exercise) (iv) Gifu Prefecture Nuclear Emergency Response Exercise	(i) - (iii) August 25 and 26, 2018 (iv) November 25, 2018
Hamaoka	Shizuoka Prefecture Nuclear Emergency Response Exercise	February 5 and 6, 2019
Shimane	Shimane Prefecture Nuclear Emergency Response Exercise Tottori Prefecture Nuclear Emergency Response Exercise	October 26 and 30, 2018
Ikata	Ehime Prefecture Nuclear Emergency Response Exercise Yamaguchi Prefecture Nuclear Emergency Response Exercise	October 12, 2018
Genkai	Saga Prefecture Nuclear Emergency Response Exercise Nagasaki Prefecture Nuclear Emergency Response Exercise Fukuoka Prefecture Nuclear Emergency Response Exercise	February 2, 2019
Sendai	Kagoshima Prefecture Nuclear Emergency Response Exercise	February 9, 2019

Source: Cabinet Office

(2) Training for Staff of the National and Local Governments and Front-line Response Organizations

(Training Programs by the National Government)

The Cabinet Office has organized training of key nuclear emergency response personnel and tabletop exercises for Nuclear Emergency Response Headquarters. The objective of these initiatives was to provide local governments and other disaster response personnel with an understanding of approaches to protection measures in the Nuclear Emergency Response Guidelines and to improve their ability to respond in the event of a nuclear emergency.

The new programs that started in FY2018 included the Core Personnel Training aimed at promoting the understanding of the core roles among the nuclear emergency response personnel concerning the management of the national headquarters according to the development of the situation of a nuclear disaster, and the Practical Capacity Building Training aimed at improving various skills that are necessary for smoothly conducting resident evacuation in the event of a nuclear disaster, such as skills for formulating implementation plans.

(i) Training of key nuclear emergency response personnel

Training is provided to key disaster response personnel at local governments who deal with nuclear

emergency preparedness, to teach them basic knowledge required for nuclear emergency management. The course covers legislation concerning nuclear emergency preparedness, the Nuclear Emergency Response Guidelines, and lessons from the accident at Fukushima Daiichi Nuclear Power Station. These training sessions were held on 36 occasions in FY2018. The main topics covered in the training are as follows.

- Overview of legislation concerning nuclear emergency preparedness (classroom learning)
- Approaches to radiation protection in accordance with the Nuclear Emergency Response Guidelines (classroom learning)
- Lessons from the accident at Fukushima Nuclear Power Station (classroom learning), etc.

(ii) Tabletop Exercises for Nuclear Emergency Response Headquarters

Tabletop Exercises for Nuclear Emergency Response Headquarters are organized for key disaster response personnel at the national and local governments who deal with nuclear emergency preparedness, to provide them with the ability to respond in the event of an emergency and also to review and improve the Local Plans for Disaster Risk Reduction and Evacuation Plans formulated by local governments. These exercises were held on 10 occasions in FY2018. The main topics covered in the training are as follows.

- Activities at off-site centers (classroom learning)
- Exercises focused on challenges specific to each functional team
- Tabletop exercise based on scenarios, etc.

(iii) Core Personnel Training

The Core Personnel Training is conducted for those who play leading roles among key disaster response personnel at the national and local governments, with an aim to equip them with necessary knowledge and skills. The training was conducted on a pilot basis in FY2018. After that, two rounds of the training were held, bearing in mind the opinions and requests heard after the pilot training program. The main topics covered in the training are as follows.

- Emergency situation concerning power generation reactors (lecture)
- Nuclear emergency and health hazards (lecture)
- Protective measures against nuclear emergencies (lecture)
- Tabletop exercise

(iv) Practical Capacity Building Training

a. Inspection of evacuation and relocation areas, etc.

The Practical Capacity Building Training was conducted for local government employees in charge of developing plans for temporary decontamination and inspection of evacuation and relocation areas, in order to strengthen their skills to formulate specific plans, manuals, etc. This training was held seven times in FY2018. The main topics covered in the training are as follows.

- Basic principles for the inspection of evacuation and relocation areas (lecture)
- Exercise concerning the planning of the inspection of evacuation and relocation areas

b. Evacuation by bus

The Practical Capacity Building Training was conducted for local government employees in charge of planning evacuation by bus, in order to strengthen their skills to formulate specific bus evacuation plans, manuals, etc. This training was held twice on a trial basis in FY2018. The main topics covered in the training are as follows.

- Challenges concerning bus resident evacuation following the Fukushima nuclear disaster; planning skills required to solve the challenges (lecture)

- Status of preparation of a bus evacuation plan in each prefecture

(Training Programs by Local Governments)

From FY2018, each prefecture took initiative in planning and implementing the training for disaster response personnel and basic training in nuclear emergency preparedness, with support from the Cabinet Office as necessary.

(i) Training for disaster response personnel

Training was provided for disaster response personnel including the employees of private business operators who carry out activities to protect local citizens from radiation in the event of a nuclear emergency. As well as providing them with the basic knowledge required for radiation protection, this course teaches them about the basic approach to protecting citizens from radiation and the sequence of protective activities.

(ii) Basic training in nuclear emergency preparedness

Basic training in nuclear emergency preparedness was provided to key disaster response personnel at local governments who deal with nuclear emergency preparedness, to teach them the basic knowledge required for radiation protection.



Lecture
(Training of key nuclear emergency response personnel)



Exercise
(Tabletop Exercises for Nuclear Emergency Response Headquarters)



Exercise
(Core Personnel Training)



Exercise
(Practical Capacity Building Training: Inspection of evacuation and relocation areas, etc.)

3-4 Strengthening International Partnerships

International organizations such as the International Atomic Energy Agency (IAEA) and various countries undertake initiatives concerning off-site nuclear emergency preparedness. Such advanced knowledge is required to raise the standard of Japan's own nuclear emergency preparedness.

Accordingly, the government has sought to share its knowledge and experience of nuclear emergency preparedness with other countries by such means as strengthening cooperative frameworks with authorities responsible for nuclear emergency preparedness in other countries, conducting regular exchanges of opinions with them, and mutual invitation to exercises. In addition, Japan conducts surveys of the IAEA's standards regarding off-site nuclear emergency preparedness and the systems/management of major countries engaging in nuclear power generation.

(1) Cooperation Focused on Nuclear Emergency Preparedness Systems

(i) Cooperation with the U.S.

Japan is deepening its partnership with the U.S. in the area of nuclear emergency management systems via reciprocal invitations to exercises and regular exchanges of opinions with such bodies as the Department of Energy (DOE), the Federal Emergency Management Agency (FEMA), and the Nuclear Regulatory Commission (NRC), based on the U.S.-Japan Bilateral Commission on Civil Nuclear Cooperation framework established in 2012 under the Emergency Management Working Group (EMWG).

Specifically, Japan participated in the National Radiological Emergency Preparedness Conference held in Washington, the United States in April 2018 to make a presentation on Japan's Comprehensive Nuclear Emergency Response Exercises and join the panel discussion. In August 2018, Japan shared the EMWG's initiatives and the roadmap for the future at the fifth meeting of the U.S.-Japan Bilateral Commission on Civil Nuclear Cooperation. In the same month, Japan invited officials from the U.S. to observe the Comprehensive Nuclear Emergency Response Exercise held to verify systems for responding to a nuclear emergency at Kansai Electric Power Company's Ohi and Takahama Nuclear Power Stations. After the exercise, representatives of the two countries held an exchange of views.

(ii) Cooperation with France

The Memorandum of Cooperation Between the Parliamentary Vice-Minister of the Cabinet Office of Japan and the Director-General for Civil Security and Crisis Management, Ministry of the Interior of France on Emergency Management related to Nuclear Accidents was signed in 2015. Based on this memorandum, the Cabinet Office is pursuing closer collaboration with the French Ministry of the Interior and other relevant French organizations in the area of nuclear disaster preparedness through regular opinion exchange and reciprocal invitations to exercises. Specifically, Mr. ITO, then State-Minister of Cabinet Office, visited the Ministry of the Interior of France in May 2018 to exchange views on the efforts for the enhancement of emergency response plans in the two countries based on the lessons learned from the nuclear disaster at TEPCO's Fukushima Daiichi Nuclear Power Plant.

(iii) Other international cooperation

Japan has also engaged in exchanges of opinions with and issued reciprocal invitations to observe exercises to international organizations such as the IAEA and the Nuclear Energy Agency of the Organization for Economic Cooperation and Development (OECD/NEA), as well as countries including Germany, China, and Lithuania.

Specifically, then State-Minister of Cabinet Office Ito visited the OECD/NEA in May 2018 to exchange opinions on the enhancement and strengthening of nuclear disaster preparedness in Japan.



Opinion exchange with the IAEA

In addition, Japan invited 18 representatives of international organizations and nuclear emergency preparedness organizations in various countries to observe the Comprehensive Nuclear Emergency Response Exercise held at Ohi and Takahama Nuclear Power Stations. Members of the delegations spent three days in the area, where they observed the evacuation of residents and the Declaration of a Nuclear Emergency Situation from the Prime Minister.

(2) Surveys of International Standards, etc.

December 2015 saw the first meeting of the IAEA's new Emergency Preparedness and Response Standards Committee (EPReSC), which has been held on a regular basis since then to examine the IAEA's standards regarding off-site nuclear emergency preparedness and the systems/management of major countries engaging in nuclear power generation. The Cabinet Office attended the meeting (the 6th meeting from June 12 to 14, 2018 and the 7th meeting from October 30 to November 1, 2018), and participated in discussions with experts from the IAEA and other member countries.

Section 4: 2018 Comprehensive Nuclear Emergency Response Exercise

4-1 Overview of Exercise

(1) Positioning and Objectives

The Comprehensive Nuclear Emergency Response Exercise is a joint exercise involving the national government, local governments, and nuclear operators, in accordance with the Act on Special Measures Concerning Nuclear Emergency Preparedness. Based on the scenario of a nuclear emergency, it aims to verify systems for responding to such an emergency. The 2018 Comprehensive Nuclear Emergency Response Exercise was held at the Ohi and Takahama Nuclear Power Stations with the objectives as listed below (Reference: https://www8.cao.go.jp/genshiryoku_bousai/kunren/h30sg.html).

- To confirm the effectiveness of the disaster preparedness systems of the national government, local governments, and nuclear operators, and the cooperative frameworks of related organizations
- To confirm national and local systems and procedures specified in manuals for responding to a nuclear Emergency
- To verify the Evacuation Plan based on the Ohi Region Emergency Response and the Takahama Region Emergency Response (Fig. 4-1-1)