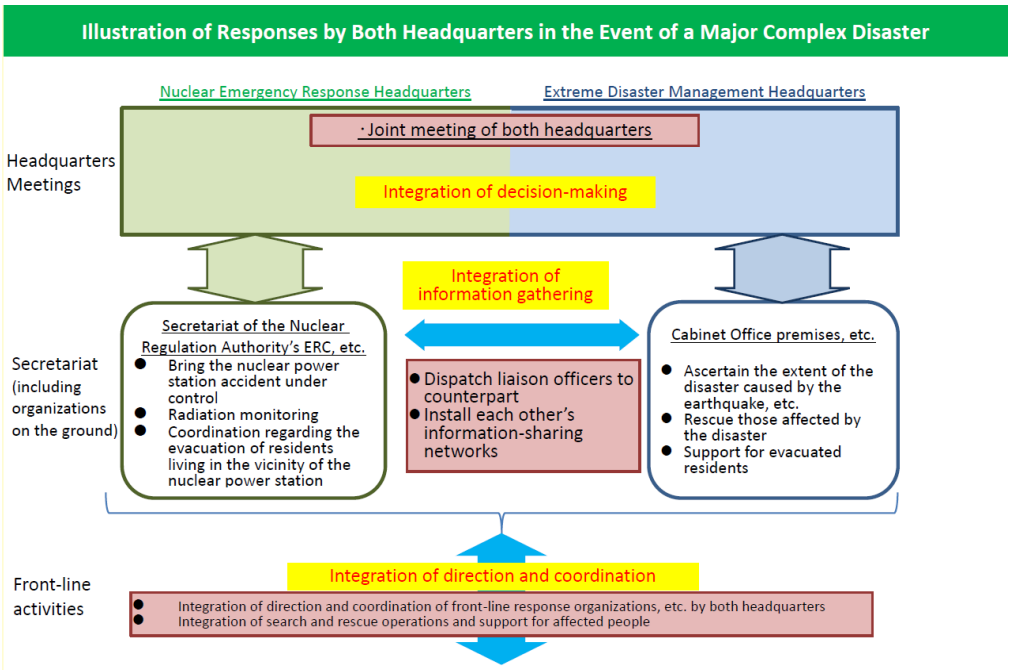
Fig. 1-2-2 **Illustration of Responses by Both Headquarters in the Event of a Major Complex**



Source: Cabinet Office

Section 2: Bolstering Nuclear Disaster Management and Radiation Monitoring Under the NRA

It is absolutely vital to implement ongoing initiatives to ensure trust in the administration of nuclear energy regulation, taking into account the lessons from the accident at Tokyo Electric Power Company's Fukushima Daiichi Nuclear Power Station. The Nuclear Regulation Authority (NRA) is tackling various policy challenges, based on its guiding principles of independent decision making, effective actions, open and transparent organization, improvement and commitment, and emergency response, in order to fulfill its mission of protecting the general public and the environment through rigorous and reliable regulation for nuclear power.

2-1 Initiatives in Nuclear Disaster Management

The NRA strives to enhance the Nuclear Emergency Response Guidelines by actively incorporating the latest international knowledge, in order to ensure that the optimal judgment criteria are used in formulating disaster management plans at all times. On July 25, 2018, the NRA revised the Guidelines to add a provision on the establishment of the Core Advanced Radiation Emergency Medical Support Center, with the objective of nuclear emergency response consistent with the international standards. In addition, the Facility Requirements to Medical Institutions for Nuclear Emergency were also revised on the same day. In March 2019, the National Institutes for Quantum and Radiological Science and Technology was designated as a Core Advanced Radiation Emergency Medical Support Center (Reference: https://www.qst.go.jp/).

In October 2018, the NRA published the Reference dose to be referred in formulating proactive nuclear emergency response program (Reference: http://www.nsr.go.jp/activity/bousai/measure/index.html).

Steady progress is being made in developing a medical care system for nuclear emergency, and support for designation of Nuclear Emergency Core Hospitals.

2-2 Emergency Response Initiatives

The NRA established the “Rules on Nomination of Staff to be Engaged in Emergency Response Operations” on October 1, 2018, in order to facilitate smooth implementation of emergency response operations based on nuclear emergency response manuals. With that, the NRA clarified the duties of emergency response staff at normal times and in emergencies and nominated staff members to carry out clearly defined emergency response duties.

The NRA also participated in the Emergency Drills by Nuclear Operators, as in FY2017, seeking further improvement of emergency preparedness and response such as a smoother approach to sharing information with the plant team of the NRA’s Emergency Response Center (ERC) and immediate situational response centers for nuclear facilities.

In addition, at the Debriefing Session of Emergency Drills by Nuclear Operators in FY2018, the NRA reported the evaluation results for the Emergency Drills by Nuclear Operators in commercial power reactor facilities. For nuclear fuel facilities, the NRA decided to apply evaluation similar to that for commercial power reactors on a trial basis, to develop performance indicators for nuclear fuel facilities taking into account the results of the trial operation, and to start full implementation when the Emergency Drills by Nuclear Operators in FY2018 are conducted. Furthermore, on the basis of the results of the Emergency Drills in FY2017, the Training Scenario Development Working Group set up under the Debriefing Session of Emergency Drills by Nuclear Operators examined the implementation plan for FY2018 and developed scenarios, conducted these Drills, and evaluated the results. In FY2018, the Nuclear Operators conducted this implementation plan for commanders judging the ability at three nuclear operators and courses for response capabilities at two nuclear operators.

2-3 Emergency Radiation Monitoring Initiatives

To conduct effective emergency monitoring in accordance with the Nuclear Emergency Response Guidelines, the NRA established emergency monitoring centers in all areas in which nuclear power reactor facilities are located. The NRA has maintained necessary equipment and materials at each emergency monitoring center in order to secure their functionality in the event of a nuclear disaster. It also intends to enforce and reinforce the emergency monitoring systems by deploying personnel in charge of radiation monitoring at the NRA office.

Following the 2018 Hokkaido Eastern Iburi Earthquake, there were disruptions to the operation of monitoring posts and signal transmission, which were necessary for emergency protective measures against nuclear disasters. These disruptions were caused by a power outage. Therefore, the NRA conducted inspections on the power sources of prefecture-owned monitoring posts, the composition of the communication equipment system, and the status of installation of alternative monitoring posts that can be used in the case of a long-term power outage. The NRA decided to improve monitoring posts with problems, using measures for securing multiple power sources and communication means, such as installing emergency power generators or portable monitoring posts and introducing various communication means, in order to maintain the monitoring function in the event of a disaster (Three-Year Emergency Response Plan for Disaster Prevention, Disaster Mitigation, and Building National Resilience (Cabinet decision on December 14, 2018)).

2-4 Accidents and Failures

The Act on the Regulation of Nuclear Source Material, Nuclear Fuel Material, and Reactors requires nuclear licensees, etc. to report accidents and failures that occur at nuclear power facilities to the NRA, while the Act on Prevention of Radiation Hazards due to Radioisotopes, etc. requires permission or notification users, etc. to report accidents and failures that occur at radio isotope facilities. Of the reports received in FY2018, five came from nuclear licensees, etc. and seven from permission or notification users, etc.