

As of 20:00, March 17, 2011  
Japan Atomic Energy Agency

Situation and response of JAEA to the Earthquake in Northeastern Japan (Outline of activities on March 11-17)

#### Summary

The Japan Atomic Energy Agency (JAEA) established emergency response headquarters lead by the president immediately after the earthquake in northeastern Japan. The headquarters are continuously collecting detailed information of the equipment and facilities from all the sites of JAEA as well as giving directions to the sites towards recovery. JAEA is also, as a designated public institute, supporting activities of other organizations.

#### Situation of each site

- Checks of facilities were made immediately after the earthquake of March 11.
- Commercial electric supply was stopped at the sites in Ibaraki Prefecture. There has been no effect on the environment, no fire accident and no serious injury, although there were some damages to facilities and equipment. Necessity minimum facilities were operated based on electric supply from emergency electric generators using heavy oil or other fuel.
- On March 13, commercial electric supply has resumed and equipment and facilities are in the process of restart in the Nuclear Science Research Institute and the Nuclear Fuel Cycling Engineering Laboratories. In O-arai R&D Center, electric supply has resumed in the northern half part of the Center on March 13. Repair work for the in-site transformer station of the southern part has been carried out. On March 16, commercial electric supply to Naka Fusion Institute has resumed and the process of start supplying electricity to each facility is under way.
- On March 11, electric supply to the Aomori R&D Center was stopped. There was no damage to the facility. Commercial electric supply was resumed by March 13.
- There has been no abnormality in any other sites (Horonobe, Takasaki, Tono, the Tsuruga Head Office, Monju, Fugen, Kansai, and Ningyotoge).

#### Assistance to the Fukushima No.1 and No. 2 Nuclear Power Plants

- Nuclear Emergency Assistance & Training Center (NEAT) is assisting activities of

the Fukushima No.1 and No. 2 Nuclear Power Plants upon request by Ministry of Education, Culture, Sports, Science and Technology (MEXT).

- Experts from JAEA are participating in the emergency advisory group of The Nuclear Safety Commission of Japan.

#### Situation of each Site

##### Nuclear Science Research Institute including J-PARC

- Checks of facilities were made immediately after the earthquake of March 11. There have been no effects on the environment, no fire accident and no serious injury, although there were some damages to facilities and equipment. Necessity minimum facilities were operated based on electric supply from emergency electric generators using heavy oil or other fuel.
- Great gaps between buildings of J-PARC and surrounding ground have occurred. Examination on the accelerators inside the facilities has not been conducted due to lack of electric supply. Restart of the facility may take long time.
- On March 13, commercial electric supply has resumed since around 15 o'clock and electric supply from the ultrahigh voltage transformer station to each facility has completely restored by March 16. Electric power sources for lightings and other purposes were recovered in almost all facilities and fire alarms were recovered in around 60% of facilities.
- On March 15, industrial water supply from Ibaraki Prefecture was received and water supply was restored to the inlet of each facility. Checkups of piping and related equipment are being conducted.
- Due to the damage to the 1<sup>st</sup> Administration Building, the use of the building was stopped and the emergency task force was established in a temporary building in front of the 1<sup>st</sup> Administration Building, and the preparation of equipment is under way.

##### Nuclear Fuel Cycling Engineering Laboratories

- Checks of facilities were made immediately after the earthquake of March 11. There has been no effect on the environment, no fire accident and no serious injury, although there were some damages to facilities and equipment. Necessity minimum facilities were operated based on electric supply from emergency electric generators.
- On March 13, commercial electric supply has resumed since around 15:30 and all the electric supply was replaced from emergency electric generators to commercial

supply by March 14. Other systems, for which soundness of buildings are being conducted, are in the process of restart.

- On March 15, industrial water supply from Ibaraki Prefecture was received and water supply was restored to the reprocessing facility within the same day. Checkups of piping and related equipment of the other facilities are being conducted.
- On March 17, 4 experts of monitoring survey are being dispatched to Hitachi Health Center.

#### O-arai Research and Development Center

- Checks of facilities were made immediately after the earthquake of March 11. There has been no effect on the environment, no fire accident and no serious injury, although there were some damages to facilities and equipment. Necessity minimum facilities were operated based on electric supply from emergency electric generators using heavy oil or other fuel.
- Commercial electric supply resumed through transformer station of the northern part of the center at around 20:00 on March 13, all the equipment and facilities have been restored on March 14. The transformer station of the southern part of the center requires repairing work, which is expected to start on or after March 14. Until recovery of the station, necessity minimum facilities operate using emergency electric generators.
- Repair works were conducted on the transformer station of the southern part of the Center on March 16. Since the insulators of the electric accessing facility were found temporarily supportable for receiving the commercial electric supply, the electric supply is expected to recover around the end of this week after necessary engineering works.
- The northern part of the center is receiving public drinking water supply as well as industrial water.

#### Naka Fusion Institute

- Checks of facilities were made immediately after the earthquake of March 11. There has been no effect on the environment, no fire accident and no serious injury, although there were some damages to facilities and equipment. Electricity supply was terminated at around 17:30 and the operation of facilities was stopped.
- The monitoring posts resumed operation at around 19:30 on March 12 using

emergency electric generators.

- Situation of damages to equipment and facilities were checked on March 13.
- On March 16, commercial electric supply has resumed since around 18:30 and all the electric supply to each facility will be resumed after checkup of equipment.

#### Aomori Research and Development Center

- Checks of facilities were made immediately after the earthquake of March 11. There has been no damage to the facilities.
- Electric supply was resumed to the Ominato facility on March 12 and the Sekinehama facility on March 13. Electric supply resumed to the Rokkasho facility on March 13. All the facilities are receiving commercial electric supply.

#### Head Office (Tokai, Ibaraki)

- Some building facilities have been damaged and the building usage has been suspended.
- On March 16, water flow examination was conducted in the Head Office building. Checkups of other equipment and facilities are under way.
- Emergency activities are conducted at the Nuclear Emergency Assistance & Training Center (NEAT).

#### Other sites

- There has been no trouble in other sites, namely, Horonobe, Takasaki, Tono, Tsuruga Head Office, Monju, Fugen, Kansai, and Ningyotoge
- No abnormality at intakes of sea water at Monju and Fugen.

#### Assistance to the Fukushima No.1 and No. 2 Nuclear Power Plants

##### Nuclear Emergency Assistance & Training Center (NEAT)

- Emergency activities have been conducted in cooperation with the government.
- Experts of environmental radiation monitoring were dispatched to Fukushima No. 1 Nuclear Power Plant upon request from MEXT. The first group of 7 experts departed at 4:30 by a helicopter from Hyakuri airbase and started monitoring work at 10:00 March 12.
- The second group of 9 experts departed with a monitoring car over the land route and started monitoring work on March 13.
- The third group of 12 monitoring experts arrived on March 14 at a building (called Jichikaikan) of Fukushima local government and started its activities using this

place as a base.

- The first group of 7 returned to the NEAT before dawn on March 15.
- The fourth group of 11 experts with 5 vehicles (monitoring 2, mobile whole-body counter 1, body surface contamination counter 1 and body cleansing 1) left NEAT at around 12:30 on March 15 over the land route and started activities in the morning of March 16 based on the Fukushima Jichikaikan.
- On March 15, experts were dispatched to the head office of Fukushima prefectural government to perform radiation dose assessment upon request from Fukushima Prefecture and started activities on March 16.
- On March 16, an expert of radiation assessment made explanation about health influence of radiation at the meeting for evacuees from Fukushima Prefecture in Tsuchiura city.
- On March 17, Resident health consultation hotlines were installed.
- The fifth group, for replace of the third group of 12 experts, is scheduled to be dispatched on March 18.

Supporting staff members from JAEA (As of 18:00, March 17)

Place	Prime objective	Present active personnel	Accumulated personnel
Fukushima Prefecture	Emergency Monitoring (Fukushima Jichikaikan)	12	28
	Contamination survey (Fukushima Prefectural Medical University)	15	15
	Logistics (Transportation, etc)	7	19
Ibaraki Prefecture	Consultation to local residents (Ibaraki Prefecture Office)	1	1
	Contamination survey (Hitachi Health Center)	4	8

	Explanation to evacuated residents, etc.) (Tsukuba-city Douhou Park)	1	2
Total		40	73

Supporting equipment from JAEA (As of 18:00, March 17)

Items	Categories	Numbers
Special Mobile Cars	Whole Body Counter Car	1
	Surface Contamination Counter Car	1
	Body Decontamination Car	1
	Monitoring Cars	3
Measurement Devices	Survey Meters	124
	Personal Dosimeters	18

Emergency advisory group of The Nuclear Safety Commission of Japan

- Five experts of JAEA are participating in the emergency advisory group of The Nuclear Safety Commission of Japan.
- Additional 2 experts will participate in the emergency advisory group.