

March 12, 2011

Nuclear and Industrial Safety Agency

Seismic Damage Information(the 11th Release)
(As of 7:00 March 12, 2011)

Nuclear and Industrial Safety Agency (NISA) confirmed the current situation of Higashidori and Onagawa NPSs, Tohoku Electric Power Co., Inc

Higashidori, Fukushima Dai-ichi, Fukushima Dai-ni and Kashiwazaki-Kariwa NPSs, Tokyo Electric Power Co., Inc. and electricity, gas, heat supply and complex as follows:

1. Summary of Damage(Earthquake at Sanriku-Oki)

(1) Time of Occurrence: 14:46 (UTC 5:46) March 11, 2011, Friday

(2) Epicenter: Off-Coast of Sanriku (North Latitude: 38; East Longitude: 142.9), 10km deep, M8.8

(3) Seismic Intensity in Japanese Scale

<Area of Seismic Intensity Larger Than and Including 4>

7: Northern Miyagi Prefecture

6+: Northern and southern Ibaraki Prefecture

5+: Sanpachi-Kamikita Aomori Prefecture

5-: Chuetsu, Niigata Prefecture

<Municipality of Seismic Intensity Larger than and Including 4>

6+: Naraha Machi, Tomioka Machi, Ookuma-machi, and Futaba-machi, Fukushima Prefecture

6-: Ishinomaki-city and, Onagawa town (by Seismograph of NPP)of , Miyagi Prefecture and Tokaimura, Ibaraki Pref.

5-: Kariwa-village, Niigata Prefecture

4: Rokkasho-village, Higashidori-village, Aomori Prefecture, Kashiwazaki-city, Niigata Prefecture and Yokosuka-city, Kanagawa Prefecture

1: Tomari-village, Hokkaido

1. The status of operation at Power Stations(Number of automatic shutdown(units): 10 (as of 03:30, March12)

a. Onagawa Nuclear Power Station (Onagawa-machi and Ishinomaki-shi, Miyagi Prefecture)

(1) The status of operation

Unit 1 (524MWe): automatic shutdown

Unit 2 (825MWe): automatic shutdown

Unit 3 (825MWe): automatic shutdown

(2) Readings of monitoring post etc.

Variation in the monitoring post readings: No

Variation in the main stack monitor readings: No

(3) Report concerning other malfunction

Report of fire: CO2 extinguishment started at 17:15

b. Fukushima Dai-ichi Nuclear Power Station, Tokyo Electric Power Co.,Inc.(TEPCO)

(Okuma-machi and Futaba-machi, Futaba-gun, Fukushima Prefecture)

(1) The status of operation

Unit 1 (460MWe): automatic shutdown

Unit 2 (784MWe): automatic shutdown

Unit 3 (784MWe): automatic shutdown

Unit 4(784MW): in periodic inspection outage

Unit 5(784MW): in periodic inspection outage

Unit 6(1,100MW): in periodic inspection outage

(2) Readings at monitoring post etc.

Variation in the monitoring post readings: No

Variation in the main stack monitoring readings: No

(3) Report concerning other malfunction

Article 10* of Act on Special Measures Concerning Nuclear Emergency

Preparedness (Fukushima Dai-ichi, Unit 3)

(*A heightened alert condition)

Article 15** of Act on Special Measures Concerning Nuclear Emergency

Preparedness (Fukushima Dai-ichi, Units 1 and 2)

(** Nuclear emergency situation)

Situation of power source to recover water injection function at the Station.
-Cable from electric power generating cars are under connecting work(as of 04:00, March 12)

Pressure in the containment vessel has arisen. The pressure could have arisen to 840kPa as compared to the design pressure of 400kPa.

It was confirmed that radioactivity was increased from 04:00, March 12 by the measurement of radioactive materials in the surrounding area of the power station using monitoring cars. (As of 05:20, March12)

MP6 (near the main gate) 0.07microSv/h ->0.59microSv/h
(04:00, March12->04:30, March 12)

MP8 (near the main gate) 0.07microSv/h ->0.38microSv/h
(04:00, March 12->04:35, March 12)

*) measured activity level is such value as to take about 70 days to reach 1mSv which is the yearly dose limit of public

c. Fukushima-Daini Nuclear Power Station(TEPCO)

(Naraha-cho/Tomioka-cho, Futaba-gun, Fukushima pref.)

(1) The status of operation

Unit1(1,100MW): automatic shutdown

Unit2(1,100MW): automatic shutdown

Unit3(1,100MW): automatic shutdown

Unit4(1,100MW): automatic shutdown

(2) Readings at monitoring post etc.

Variation in the monitoring post readings: No

Variation in the main stack monitoring readings: No

(3) Report concerning other malfunction

Report of fire: No

Article 10* of Act on Special Measures Concerning Nuclear Emergency

Preparedness (Fukushima Dai-ni, Units 1,2 and 4)

(*A heightened alert condition)

Article 15** of Act on Special Measures Concerning Nuclear Emergency

Preparedness (Fukushima Dai-ni, Units 1,2 and 4)

(**Nuclear emergency situation)

3. Industrial Safety

○Electricity(04:19, March12)

* Tokyo Electric Power Co. (as of 04:19, March 12, 2011)

Scale of loss of electrical power: 1,540 thousand houses

Power loss area:

Gunma Pref.: Oizumi-machi, Tatebayashi-shi

Ibaraki Pref.: Whole area,

Tochigi Pref.: Whole area of eastern part, Utsunomiya-shi, Ashikaga-shi,
Sano-shi,

Chiba Pref.: Katori-shi, Yamatake-shi

Saitama Pref.: Konosu-shi, Gyoda-shi

Yamanashi Pref.: Hokuto-shi, Fuji Yoshida-shi

* Tohoku Electric Power Co. (as of 22:00, March 11, 2011)

Scale of loss of electrical power: approx.4,400 thousand houses

Power loss area:

Aomori Pref.: Whole area

Iwate Pref.: Whole area,

Akita Pref: Whole area

Miyagi Pref: whole area

Yamagata Pref: Almost whole area

Fukushima Pref: Some area

* Hokkaido Electric Power Co. (as of 20:00, March 11, 2011)

Scale of loss of electrical power:560 houses, maximum number:
approx:3,000 as of 19:00

*Chubu Electric Power Co. (as of 22:50, March 11, 2011)

Scale of loss of electrical power: 30 houses(Nagano prefecture),

○General Gas(as of 06:30, March 12)

The Japan Gas Association is preparing to dispatch an advance unit to Sendai-shi upon request from Sendai-shi.

Sendai-city municipal Gas, Kesenuma-city municipal Gas, Ishimaki Gas have trouble contacting. The Japan Gas Association confirmed that there are no supply disruption in the supply area of city gas in Hokkaido, Aomori, Yamagata, and Akita prefecture.

* Tokyo Gas Co.

Hitachi branch: 30,008 houses are in supply disruption. There is no damage in equipment, however, equipment is inoperable due to loss of power. Walkdown unit of eight person departed at 18:30, March 11. Time of recovery is not certain.

Eastern part of Joso: 453 houses were in supply disruption in Ushiku (supply restarted at 17:10, March 11)

471 houses were in supply disruption in Ushiku-kariya cho (supply restarted at 22:36 March 11)

77 houses are in supply disruption in Ryuugasaki (supply restarted at 16:20, March 11)

40 houses are in supply disruption in Nishi-ku, Yokohama-shi (supply restarted at 17:29, March 11)

Gas leaked from a Nozzle of an LNG tank at Sodegaura but no ignition (restored on 22:30, March 11)

*Gas Bureau of Sendai-shi: whole supply disruption (approx. 360 thousand houses)

*Shiogama Gas Co.: 12,000 houses are in supply disruption

*Kamaishi Gas Co.: 10,000 houses are in supply disruption. First floor of this Gas facility sank.

*Hatano Gas Co.: 330 houses are in supply disruption

*Keiyo Gas Co.: Leakage occurred at 5 locations of middle pressure conduit
Leakage occurred at many parts of Low pressure conduits
5,445 houses in Urayasu-shi are in supply disruption.
Supply to Yachiyo Station stopped.

*Kuju Kurityo Gas: Approx 258 houses are in supply disruption.

*Atsugi Gas Co: leakage occurred at 1 location of middle pressure conduit.

*Fukushima Gas Co.: Approx 2,726 houses are in supply disruption (which are equal to a quarter of whole customer in this region)

*Tohoku Gas (part of Shirakawa-shi): 300 houses are in supply disruption

*Tokiwa Kyodo Gas (Iwaki-shi): 15,000 houses (whole customer) are in supply disruption

*Tobu Gas (Tsuchiura-shi): 7,500 houses are in supply disruption

*Tosai Gas (Kasukabe-shi) Gas leakage occurred from conduit. 150 houses in

apartment are in supply disruption

*Odawara Gas(Odawara-shi)

leakage occurred at 1 locations of low pressure branch conduit and 3 locations of ex-core inner conduit and have restored at 21:30 11 March. Other areas are under investigation.

○Community Gas(as of 06:30, March 12)

Severe damage has not been reported to Japan Community Gas Association so far. No information is available about the damage in North part of Ibaraki prefecture.

*Tokyo Gas energy(North part of Ibaraki): Factory stopped supply to 943 houses in Nakago-New Town due to the leakage from pipe.

*Sato Kosan (based in Iwatsuki-ku, Saitama City) Iwatsuki-housing complex: Gas leakage occurred from conduit. 451 sites are in supply disruption.

*Syutoken Gas(based in Sakura-City) Chitose-housing complex:1,320 houses are in supply disruption

*Kashima Marui Gas(Kamisu-shi):Gas conduit was damaged. 527 houses are in supply disruption. Time of recovery is not certain.

*Imaichi Gas: Gas leakage occurred from conduit at the simple gas complex in Nikko-shi: 240 houses were in gas supply disruption.

*Nihon Gas: Gas leakage occurred from conduit at simple gas complex in the jurisdiction: 76 houses in Nasu-karasuyama-shi, 97 houses in Inashiki-shi, 594 houses in Tokai-mura, Natsu-gun,370 houses in Yita-shi, and 3299 houses in Itako-shi were in gas supply disruption.

*Tajima : 250 houses were in gas supply disruption at the simple gas complex in Hachioji-city. This area will be restored within March 12.

These areas other than Itako-shi will be restored on March 12. It will take long before restoration in Hinode housing complex in Itako-shi due to liquefaction of the ground. 212 houses in Noda-shi were in gas supply

disruption. This area was supposed to be restored in March 11.

○Gas conduit Operators(as of 04:40, March12)

*JX Nikko Nisseki Energy: Hachinohe LNG Station

Premise, electric room and in-house electricity generator equipment, were flooded by the 2nd wave of tsunami and the gas supply was stopped.

According to Japan National Gas Association, there are no damage to pipelines of conduit-transport companies.

○Heat supply(as of 04:40, March12)

*Yamagata Netsu Kyokyu(Yamagata-shi): Stopped heat supply

*"HITACHI NETSU ENERGY"(Hitachi City): stopped heat supply due to the electrical outage at 15:19, March11.

*"CHIBA NETSU KYOKYU"(Chiba-city): stopped freezer, etc. at 16:19, March 11. Supply was stopped and walkdown is conducted at 16:19, March 11.

*"NISHI-IKEBUKURO NETSU KYOKYU": stopped freezer and boiler at 15:45, March 11.

*"TOKYO NETSU KYOKYU";

-stopped boiler in Takeshiba and Yurakutyo areas at 15:20, March 11

-stopped supply to one of the building complex at Hikarigaoka for approx. 3 hours due to the leakage of pipe at 21:35, March 11

*"Yokohama Business Park NETSU KYOKYU (Hodogaya-ku, Yokohama city)

15:50 Stopped steam and cold water supply to PREZZO building

16:20 restored by temporary repair

○Complex

*Cosmo Oil factory Chiba branch

A column of Butane Butylene storage tank was broken. Fire occurred due to gas leakage. One person suffered serious-injury, 2 persons suffered minor injury.

*JX Nippon Oil&Energy Corporation Sendai oil factory(sendai-city, Miyagi

prefecture)

-Fire occurred from an explosion of low temperature LPG tank(as of 22:40, March 11)

4. Action taken by NISA

(March 11)

14:46 Set up of the NISA Emergency Preparedness Headquarters (Tokyo) immediately after the earthquake

15:42: TEPCO reported to NISA in accordance with Article 10 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Fukushima Dai-ichi, Units 1,2 and 3.

16:36: TEPCO judged the event in accordance with Article 15 of the Act for Special Measures Concerning Nuclear Emergency Preparedness regarding Fukushima Dai-ichi, Units 1 and 2.(notified to NISA at 16:45)

18:08: Unit 1 of Fukushima Dai-ichi notified NISA of the situation of the Article 10 of Act on Special Measures Concerning Nuclear Emergency Preparedness.

18:33: Units 1,2 and 4 of Fukushima Dai-ichi notified NISA of the situation of the Article 10 of Act on Special Measures Concerning Nuclear Emergency Preparedness.

19:03 : Government declared the state of nuclear emergency

20:50: Fukushima prefecture's emergency preparedness headquarters - issued a directive regarding the accident occurred at Fukushima-Dai-ichi Nuclear Power Station, TEPCO that the residents living in the area of 2km radius from Unit 1 of the Nuclear Power Station must evacuate.(The population of this area is 1,864)

21:23: Directives from Prime Minister to Governor of Fukushima, Mayor of Oookuma and Mayor of Futaba were issued regarding the accident occurred at Fukushima-Dai-ichi Nuclear Power Station, TEPCO, pursuant to Paragraph 3, Article 15 of the Act for Special Measures Concerning Nuclear Emergency Preparedness as follows:

-Residents living in the area of 3km radius from Unit 1 of the Nuclear Power Station must evacuate.

-Residents living in the area of 10km radius from the Unit 1 must take sheltering.

(March12)

- 05:44 Residents living in the area of 10km radius from unit 1 of the Nuclear Power Station must evacuate by the Prime Minister Direction.
- 06:01 Regarding Units 1,2 and 4 of Fukushima Dai-ni NPS, TEPCO reported NISA in accordance with Article 15 of Act on Special Measures Concerning Nuclear Emergency Preparedness.

2. Summary of Damage(Earthquake at Nagano prefecture)

- (1) Time of Occurrence: 3:59 (UTC 18:59) March 12, 2011, Friday
- (2) Epicenter: North part of Nagano Prefecture(North Latitude: 37; East Longitude: 138.6), 10km deep, M6.6

- (3) Seismic Intensity in Japanese Scale

<Area of Seismic Intensity>

5: Kashiwazaki-shi, Niigata prefecture and Kariha-villege, Niigata prefecture.

1. Status of operation at Power Stations(NumNumber of automatic shutdown(units):10 (as of 3:30, March 12)

a. Kashiwazaki-Kariha Nuclear Power Station, Tokyo Electric Power Co., Inc.(TEPCO)

- (1) The status of operation

Unit1(1,100MW): Keep operation

Unit2(1,100MW): in periodic inspection outage

Unit3(1,100MW): in periodic inspection outage

Unit4(1,100MW): in periodic inspection outage

Unit5(1,356MW): Keep operation

Unit6(1,356MW): Keep operation

Unit7(1,356MW): Keep operation

- (2) Readings of monitoring post etc.

Variation in the monitoring post readings: No

Variation in the main stack monitor readings:No

- (3) Report concerning other malfunction

Report of fire: No

Earthquake at Nagano Prefecture

1. Outline

2. Status of Operation at Power Stations (Number of automatic shutdown units: 10 (as of 3:30, March 12))

3 Industrial Safety

○General Gas

Nagano municipal gas (Nagano city), Joetsu municipal gas, Myouko municipal gas, Ojiya municipal gas, Mitsuke municipal, Kashiwazaki municipal gas, Hokuriku gas of Nagaoka are (Nagaoka city) confirmed there are no supply disruption

Facilities which have confirmed safety will be eliminated from the next press release.

(Contact Person)

Mr. Masaomi Koyama

Deputy Director, International Affairs
Office, NISA/METI

Phone:+81-(0)3-3501-1087