

Fukushima Dai-ri NPS

March, 2011
at 11:00

MP1 : 16.230 μ Sv/h
(Reference Value: 0.035 ~)

MP2 : 9.683 μ Sv/h
(Reference Value: 0.042 ~)

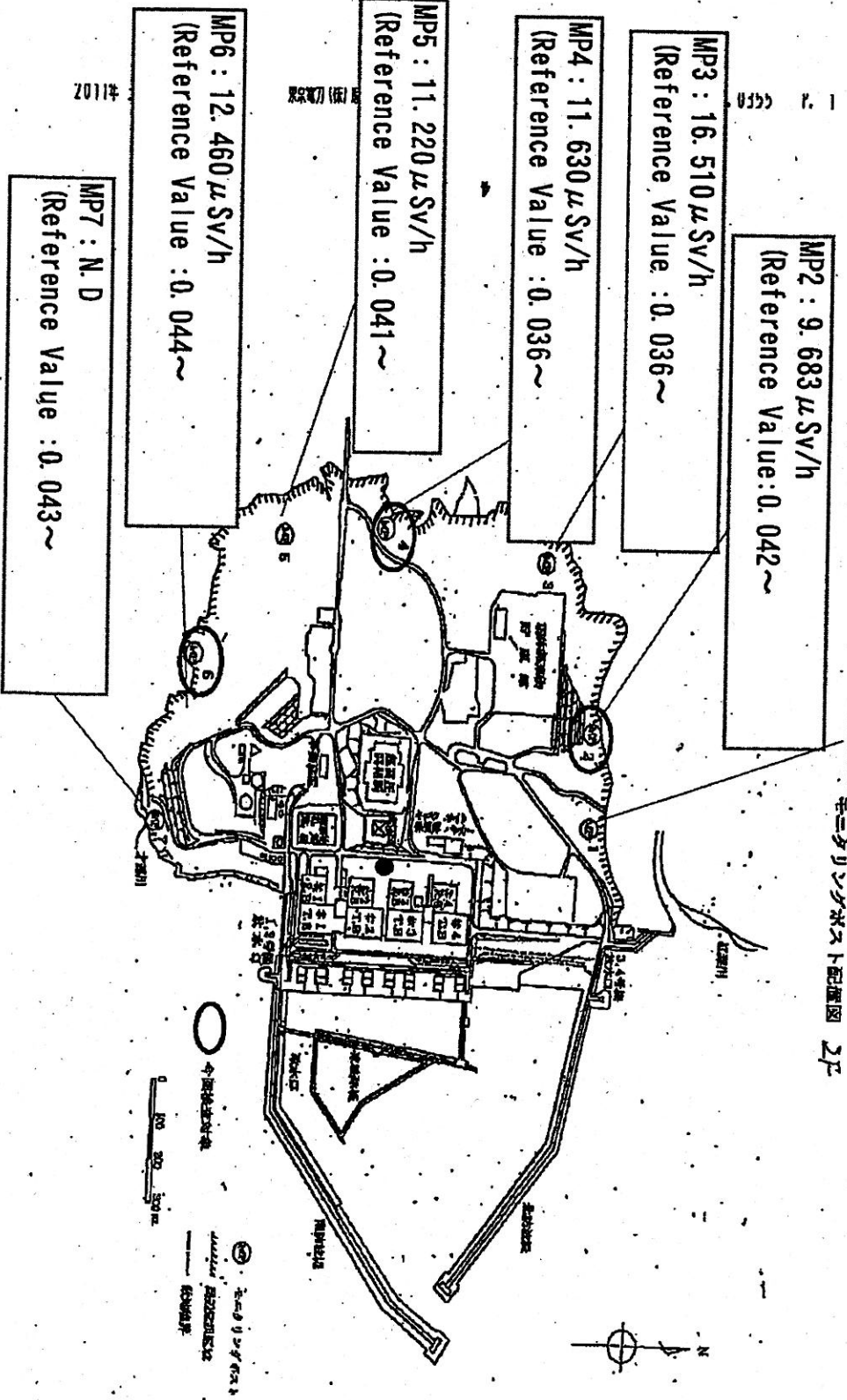
MP3 : 16.510 μ Sv/h
(Reference Value : 0.036 ~)

MP4 : 11.630 μ Sv/h
(Reference Value : 0.036 ~)

MP5 : 11.220 μ Sv/h
(Reference Value : 0.041 ~)

MP6 : 12.460 μ Sv/h
(Reference Value : 0.044 ~)

MP7 : N. D
(Reference Value : 0.043 ~)



#1102

Results of the radiation monitoring at each NPSs

| Range of normal average value | Company | NPS | 19 March, 2011 | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|-----------------------------|---|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 |
| 0.023~0.027 | Hokkaido Electric Power Co. | Tomari NPS | 0.022 | 0.022 | 0.023 | 0.023 | 0.023 | 0.023 | 0.023 | 0.023 | 0.023 | 0.023 | 0.024 | 0.023 | 0.023 | 0.023 | 0.023 | 0.023 | 0.023 | 0.023 | 0.023 | 0.023 | 0.023 | 0.023 | 0.023 | 0.023 |
| 0.024~0.060 | Tohoku Electric Power Co. | Onagawa NPS | 2.50 | 2.60 | 2.40 | 2.30 | 2.40 | 2.30 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.10 | 2.10 | 0.023 |
| 0.012~0.060 | Tohoku Electric Power Co. | Hirashiro NPS | 0.017 | 0.019 | 0.023 | 0.019 | 0.018 | 0.018 | 0.018 | 0.018 | 0.017 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 |
| 0.036~0.052 | Tokyo Electric Power Co. | Edo Nuclear District Fukushima Daiichi NPS | 0.082 | 0.082 | 0.082 | 0.082 | 0.082 | 0.082 | 0.082 | 0.082 | 0.082 | 0.082 | 0.082 | 0.082 | 0.082 | 0.082 | 0.082 | 0.082 | 0.082 | 0.082 | 0.082 | 0.082 | 0.082 | 0.082 | 0.082 | 0.082 |
| 0.011~0.159 | Tokyo Electric Power Co. | Kashiwazaki Kariba NPS | 0.055 | 0.063 | 0.064 | 0.066 | 0.064 | 0.064 | 0.065 | 0.065 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 |
| 0.039~0.110 | Japan Atomic Power Co. | Tokai Dai-1 NPS | 0.605 | 0.619 | 0.609 | 0.592 | 0.592 | 0.597 | 0.581 | 0.574 | 0.574 | 0.574 | 0.574 | 0.574 | 0.574 | 0.574 | 0.574 | 0.574 | 0.574 | 0.574 | 0.574 | 0.574 | 0.574 | 0.574 | 0.574 | 0.574 |
| 0.064~0.108 | Chubu Electric Power Co. | Hamaoka NPS | 0.074 | 0.073 | 0.074 | 0.074 | 0.074 | 0.074 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 |
| 0.0207~0.132 | Chubu Electric Power Co. | Shika NPS | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 |
| 0.028~0.130 | Chugoku Electric Power Co. | Shimane NPS | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 |
| 0.070~0.077 | Tokyo Electric Power Co. | Mihama NPS | 0.073 | 0.072 | 0.073 | 0.073 | 0.073 | 0.072 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 |
| 0.045~0.047 | Tokyo Electric Power Co. | Takahama NPS | 0.042 | 0.042 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 |
| 0.036~0.040 | Shikoku Electric Power Co. | Ooi NPS | 0.036 | 0.035 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 |
| 0.011~0.080 | Kyushu Electric Power Co. | Iketa NPS | 0.014 | 0.013 | 0.014 | 0.014 | 0.014 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 |
| 0.023~0.087 | Kyushu Electric Power Co. | Genkal NPS | 0.025 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 |
| 0.034~0.120 | Japan Nuclear Fuel Limited | Sendai NPS | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 |
| 0.009~0.069 | Japan Nuclear Fuel Limited | Japan Nuclear Fuel Reprocessing | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 |
| 0.009~0.071 | Japan Nuclear Fuel Limited | Japan Nuclear Fuel Plant Disposal | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 |

*There are small deviation on the monitoring time and area because of recovery operation at that time

unit : μ Sv/h

| Range of normal average value | Company | NPS | 20 March, 2011 | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|-----------------------------|---|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 |
| 0.023~0.027 | Hokkaido Electric Power Co. | Tomari NPS | 0.023 | 0.023 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 |
| 0.024~0.060 | Tohoku Electric Power Co. | Onagawa NPS | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 0.012~0.060 | Tohoku Electric Power Co. | Hirashiro NPS | 0.018 | 0.018 | 0.018 | 0.018 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.018 |
| 0.036~0.052 | Tokyo Electric Power Co. | Edo Nuclear District Fukushima Daiichi NPS | 0.084 | 0.084 | 0.084 | 0.084 | 0.084 | 0.084 | 0.084 | 0.084 | 0.084 | 0.084 | 0.084 | 0.084 | 0.084 | 0.084 | 0.084 | 0.084 | 0.084 | 0.084 | 0.084 | 0.084 | 0.084 | 0.084 | 0.084 | 0.084 |
| 0.011~0.159 | Tokyo Electric Power Co. | Kashiwazaki Kariba NPS | 0.064 | 0.064 | 0.065 | 0.065 | 0.065 | 0.065 | 0.065 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 |
| 0.039~0.110 | Japan Atomic Power Co. | Tokai Dai-1 NPS | 0.567 | 0.562 | 0.561 | 0.558 | 0.561 | 0.561 | 0.557 | 0.554 | 0.554 | 0.554 | 0.554 | 0.554 | 0.554 | 0.554 | 0.554 | 0.554 | 0.554 | 0.554 | 0.554 | 0.554 | 0.554 | 0.554 | 0.554 | 0.554 |
| 0.064~0.108 | Chubu Electric Power Co. | Hamaoka NPS | 0.073 | 0.074 | 0.073 | 0.073 | 0.074 | 0.074 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 |
| 0.0207~0.132 | Chubu Electric Power Co. | Shika NPS | 0.069 | 0.069 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 | 0.068 |
| 0.028~0.130 | Chugoku Electric Power Co. | Shimane NPS | 0.033 | 0.033 | 0.032 | 0.033 | 0.033 | 0.032 | 0.032 | 0.032 | 0.032 | 0.032 | 0.032 | 0.032 | 0.032 | 0.032 | 0.032 | 0.032 | 0.032 | 0.032 | 0.032 | 0.032 | 0.032 | 0.032 | 0.032 | 0.032 |
| 0.070~0.077 | Tokyo Electric Power Co. | Mihama NPS | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 |
| 0.045~0.047 | Tokyo Electric Power Co. | Takahama NPS | 0.042 | 0.042 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 |
| 0.036~0.040 | Shikoku Electric Power Co. | Ooi NPS | 0.036 | 0.035 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 |
| 0.011~0.080 | Kyushu Electric Power Co. | Iketa NPS | 0.014 | 0.013 | 0.014 | 0.014 | 0.014 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 |
| 0.023~0.087 | Kyushu Electric Power Co. | Genkal NPS | 0.025 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 | 0.026 |
| 0.034~0.120 | Japan Nuclear Fuel Limited | Sendai NPS | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 | 0.038 |
| 0.009~0.069 | Japan Nuclear Fuel Limited | Japan Nuclear Fuel Reprocessing | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 |
| 0.009~0.071 | Japan Nuclear Fuel Limited | Japan Nuclear Fuel Plant Disposal | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 |

*There are small deviation on the monitoring time and area because of recovery operation at that time



News release from NISA

宛先: [Redacted]

Bcc: [Redacted]

2011/03/15 06:11

Could you, please find the latest news release about Seismic Damage Information.



News Releases on the earthquake Nb23.docx

March 14, 2011
Nuclear and Industrial Safety Agency

Seismic Damage Information (the 23rd Release)
(As of 19:30 March 14, 2011)

Nuclear and Industrial Safety Agency (NISA) confirmed the current situation of Onagawa NPS, Tohoku Electric Power Co., Inc; Fukushima Dai-ichi and Fukushima Dai-ni NPSs, Tokyo Electric Power Co., Inc. as follows:

1. The status of operation at Power Stations (Number of automatic shutdown units: 10)

○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 (784MWe): in periodic inspection outage
- Unit 5 (784MWe): in periodic inspection outage
- Unit 6 (1,100MWe): in periodic inspection outage

(2) Readings at monitoring posts

The measurement of radioactive materials in the environmental monitoring area near the site boundary conducted by a monitoring car in considering the wind flow, confirmed the increase in the radioactivity compared to the radioactivity at 07:30, March 14.

MP3 (Monitoring at North West of Site Boundary for Unit 2) :
231.1 micro Sv/h (14:30 March 14)

MP4 (Monitoring at north- west of Site Boundary for Unit 2) :
56.4 micro Sv/h(04:08 March 14)

→29.8 micro Sv/h(14:14 March 14)

MP5 (Monitoring at north-west Site Boundary for Unit 2)

6.1 micro Sv/h(14:02 March 14)

MP6 (Monitoring at the west –southwest Site Boundary for Unit 2)

3.70 micro Sv/h(16:10 March 14)

→4.2 micro Sv/h(12:34 March 14)

MP7 (Monitoring at the west –southwest Site Boundary for Unit 2)

6.1 micro Sv/h (12:16, March 14)

(3) Wind direction/wind speed (as of 14:14, March 14) at MP-4

Wind direction: North North West

Wind Speed: 2.6 m/s

(4) Major Plant Parameters (19:30, March 14)

| | unit | Unit 1 | Unit 2 | Unit 3 |
|------------------------------------|------|------------------------------|------------------------------|-----------------------|
| Reactor Pressure | MPa | 0.047 (A) 0.270 (B) | 0.65 | 0.183 (A) 0.183(A) |
| PCV Pressure | KPa | Not available | Approx. 395 | 335 |
| Reactor Water Level* | mm | Downscale(A) Downscale(B) | Downscale(A) Downscale(B) | -1900(A) -2300(B) |
| Suppression Pool Water Temperature | ℃ | Not available | Under measuring | Not available |
| Suppression Pool Water Pressure | KPa | Not available | Not available | 500 |

*: Distance from the top pellet

(5) Report concerning other malfunction

- No fire report notified to NISA
- 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. (15:42 March 11)
- TEPCO report to NISA 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 16:36 March 11)

- For Unit 1: Sea water is being injected to the Primary Containment Vessel (PCV) via the Fire Extinguishing System Line (Start up 11:55 March 13)
→Interruption of injection (01:10 March 14)
- For Unit 2: Water Injection Function has been sustained. (14:00 March 13)
- For Unit 2: Reactor Water Level is decreasing. (13:18 March 14)
- For Unit 2: Seawater injection to the Reactor Pressure Vessel (RPV) is ready through Fire Extinguishing System Line. (19:20 March 14)
- For Unit 3: Fresh water is being injected to the PCV via Fire Extinguishing System Line (FES) (11:55 March 13)
- For Unit 3: Sea water is being injected to the PCV via FESL(13:12 March 13)
- For Unit 1 and Unit 3: Injection of Sea water injection into PCV is interrupted because of the lack of sea water in pit. (01:10 March 14)
- For Unit 3: Injection of Sea water into PCV is restarted(03:20 March 14)
- For Unit 3: Unusual pressure increase was identified (11:45 March 14)
- For Unit 3: Explosion of the Reactor Building broke out similarly with Unit 1 (11:01 March 14)

○ Fukushima Dai-ni Nuclear Power Station (TEPCO)

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

(1) The status of operation

Unit1 (1,100MWe): automatic shutdown, cold shut down at 13:40, March 14

Unit2 (1,100MWe): automatic shutdown, cold shut down at 14:20, March 14

Unit3 (1,100MWe): automatic shutdown, cold shut down at 12:15, March 12

Unit4 (1,100MWe): automatic shutdown

(2) Readings at monitoring post etc.

MP1 (Monitoring at the North End of Site Boundary)

0.038microSv/h(5:00 March 14)

→0.034 microSv/h(15:40 March 14)

MP3 (Monitoring at the North/West End of Site boundary)

0.037microSv/h(5:00 March 14)

→0.035 microSv/h(15:40 March 14)

MP4 (Monitoring at the North/West End of Site Boundary)

0.038microSv/h(5:00 March 14)

→0.037microSv/h(15:40 March 14)

MP5 (Monitoring at the West End of Site Boundary)

0.042 microSv/h(5:00 March 14)

→0.042 microSv/h(15:40 March 14)

(3) Direction and velocity of wind (As of 15:40, 14 March)

Direction: West

Velocity: 6 m /s

(4) Main plant parameters (As of 18:30, 14 March)

| | unit | Unit 1 | Unit 2 | Unit 3 | Unit 4 |
|------------------------------------|------|---------------------|---------------------|---------------------|--------|
| Reactor Pressure | MPa | 0.04 | 0.06 | -0.06 | 0.35 |
| Reactor water temperature | ℃ | 46 | 88 | 32 | 142 |
| Reactor water level* | mm | 8785 | 8530 | 7636 | 5096 |
| Suppression pool water temperature | ℃ | 71 | 80 | 45 | 130 |
| Suppression pool water pressure | KPa | 282 | 253 | 132 | 324 |
| Remarks | | under cold shutdown | under cold shutdown | under cold shutdown | |

*: Distance from the top pellet

(5) Report concerning other malfunction

- None of fire report notified to NISA
- TEPCO reported to NISA in accordance with Article 10 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Fukushima Dai-ni, Units 1. (18:08 March 11)
- As same as above, TEPCO reported to NISA Fukushima Dai-ni Units 2 and 4.(18:33 March 11)
- For Unit 1: Due to Recovery of Residual Heat Removal System(RHR), water in suppression pool is started to cool for cold shut down.(01:24

March 14)

c. Onagawa Nuclear Power Station (Onagawa-cho, Oga-gun and Ishinomaki-shi, Miyagi Prefecture)

(1) The status of operation

Unit 1 (524MWe): automatic shutdown, cold shut down at 0:58, March 12

Unit 2 (825MWe): automatic shutdown

Unit 3 (825MWe): automatic shutdown, cold shut down at 1:17, March 12

(2) Readings of monitoring post

Reading of monitoring post : Changed

MP2 (Monitoring at the North End of Site Boundary)

Approx. 10,000 nGy/h (as of 13:09 March 13)

→7,200 nGy/h (07:20 March 14)

(3) Report concerning other malfunction

- Fire Smoke on the first basement of the Turbine Building was confirmed extinguished at 22:55 on March 11th.
- Article 10* of Act on Special Measures Concerning Nuclear Emergency Preparedness (Unit No. not identified) (13:09 March 13)

2. 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.

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-ni 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-ni 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 (Establishment of Government Nuclear Emergency Response Headquarters and Local Emergency Response Headquarters)
- 20:50: Fukushima Prefecture's Emergency Response Headquarters issued a direction 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 the Governor of Fukushima, Mayor of Ookuma 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 on 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.
- 24:00: Mr. Ikeda, Vice Minister of METI, arrived at the Local Emergency Response Headquarters

(March12)

- 05:22 Unit 1 of Fukushima Dai-ni notified NISA of the situation of the Article 15 of Act on Special Measures Concerning Nuclear Emergency Preparedness.
- 05:32 Unit 2 of Fukushima Dai-ni notified NISA of the situation of the Article 15 of Act on Special Measures Concerning Nuclear Emergency Preparedness.
- 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.
- 06:07 Regarding of Fukushima Dai-ni NPS, TEPCO reported NISA in accordance with Article 15 of Act for Special Measures Concerning Nuclear Emergency Preparedness.
- 06:50 According to the article 64, 3 of the Nuclear Regulation Act,

government order to control the internal pressure in Fukushima-dai-ichi Units 1 and 2

- 07:45 Directives from Prime Minister to Governor of Fukushima, Mayors of Hirono, Naraha, Tomioka, Ookuma and Futaba were issued regarding the accident occurred at Fukushima-Dai-ni 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 Fukushima Dai-ni Nuclear Power Station (NPS) must evacuate.
 - Residents living in the area of 10km radius from Fukushima Dai-ni NPS must take sheltering
- 17:00 Notification pursuant to Article 15 of the Act for Special Measure Concerning Nuclear Emergency Preparedness since the radiation level exceeded the acceptable level of Fukushima Dai-ichi NPS.
- 17:39 Prime Minister directed evacuation of the residents living within the 10 km radius from the Fukushima-Dai-ni NPS
- 18:25 Prime Minister directed evacuation of the residents living within the 20km radius from the Fukushima Dai-ichi NPS
- 19:55 Directives from Prime Minister was issued regarding sea water injection to Unit No.1 of Fukushima Dai-ichi NPS.
- 20:05 Based on the directives form Prime Minister and pursuant to Paragraph 3, Article 64 of the Nuclear Regulation Act, the Government issued an order to inject sea water Unit 1 of Fukushima Dai-ichi NPS.
- 20:20 Fukushima Dai-chi NPS, Unit1 started sea water injection.

(March 13)

- 05:38 TEPCO notified NISA of the situation pursuant to the Article 15 of Act on Special Measures Concerning Nuclear Emergency Preparedness that Unit 3 of Fukushima Dai-ichi NPS is in a loss of all coolant injection function. Recovering efforts of the power source and coolant injection function and work on venting are underway.
- 09:08 Pressure suppression in the Containment Vessel and fresh water injection started at Unit 3 of Fukushima Dai-ichi NPS.
- 09:20 Opening of Pressure vent valve of Unit 3 of Fukushima Dai-ichi NPS.
- 09:30 NISA directed the Governor of Fukushima Prefecture, the Mayors of

Ookuma-machi, Futaba-machi, Tomioka-machi and Namie-machi based on the Act for Special Measures Concerning Nuclear Emergency Preparedness on radioactivity decontamination screening.

09:38 TEPCO notified NISA that Unit 1 of Fukushima Dai-ichi NPS reached a situation specified in Article 15 of the Act for Special Measures Concerning Nuclear Emergency Preparedness.

13:09 Tohoku Electric notified NISA that Onagawa NPS reached a situation specified in Article 10 of the Act for Special Measures Concerning Nuclear Emergency Preparedness.

13:12 Fresh water injection was switched to sea water injection at Unit 3 of Fukushima Dai-ichi NPS.

14:25 TEPCO notified NISA that Fukushima Dai-ichi NPS reached a situation specified in Article 15 of the Act for Special Measures Concerning Nuclear Emergency Preparedness.

(March 14)

01:10 Sea water injection at unit 1 and unit 3 of Fukushima Dai-ichi NPS were temporary stopped due to decreasing sea water in pool

03:20 Sea water injection at unit 3 of Fukushima Dai-ichi NPS was restarted.

04:24 TEPCO notified NISA that Fukushima Dai-ichi NPS reached a situation specified in Article 15 of the Act for Special Measures Concerning Nuclear Emergency Preparedness.

07:53 TEPCO notified NISA that Fukushima Dai-ichi NPS reached a situation specified in Article 15 of the Act for Special Measures Concerning Nuclear Emergency Preparedness.

13:25 TEPCO notified NISA that Unit 2 of Fukushima Dai-ichi NPS reached a situation specified in Article 15 of the Act for Special Measures Concerning Nuclear Emergency Preparedness

<Possible Exposure to Residents>

(1) Case for Travel from Futaba Public Welfare Hospital to Nihonmatsu Man and Woman Symbiosis Center, Fukushima Prefecture

- i) No. of persons to be measured: About 60 persons
- ii) Measured Result: Not yet
- iii) Passage: Exposure could have happened while waiting to be picked up by helicopter at the Futaba high school ground
- iv) Other

Prefectural Response Headquarters judged that there were no exposure to 35 persons who traveled from Futaba Public Welfare Hospital to Kawamata Saiseikai Hospital, Kawamata-machi by the private bus provided by Fukushima Prefecture.

(2) Case for Futaba-machi Residents Evacuated by Buses

- i) No. of Persons: About 100 persons
- ii) Measured Result: 9 persons out of 100 persons

| No. of Counts | No. of Persons |
|--------------------------------|----------------|
| 18,000cpm | 1 |
| 30,000-36000cpm | 1 |
| 40,000cpm | 1 |
| little less than 40,000cpm* | 1 |
| very small counts | 5 |

*(This results was measured without shoes, though the first measurement exceeded 100,000cpm)

- iii) Passage: Under investigation
- iv) Other

Though persons evacuated in different location outside of the Prefecture (Miyagi Prefecture), all destinations are under confirmation.

<Status of the injured (As of 17:30 March 14)>

1. Injury due to earthquake
 - Two employees (slightly)
 - Two subcontract employees (one fracture in both legs)

- Two missing (in the turbine building of Unit 4)
 - One emergency patient (According to the local prefecture, one patient of cerebral infarction was transported by the ambulance)
 - Ambulance was requested for one employee complaining the pain at left chest outside of control area (conscious)
 - Ambulance was requested for two employees complaining discomfort wearing full-face mask in the main control room to be transported to the industrial doctor of Fukushima Dai-ni NPS
2. Injury due to the explosion of Unit 1 of Fukushima Dai-ichi NPS
- Four employees were injured at the explosion and smoke of Unit 1 around turbine building (out of control area). Examined by Kawauchi clinic.
3. Injury due to the explosion of Unit 3 of Fukushima Dai-ichi NPS
- Four employees
 - Three subcontractor employees
 - Four members of Self-Defence-Force (one of them will be transported to National Institute of Radiological Sciences considering internal exposure)

<Status of Evacuation (As of 15:30 March 14)>

As long as the 20 km zone of Fukushima Dai-ichi and 10 km zone of Fukushima Dai-ni are concerned, transportation by bus, self-defence force helicopter, etc. is arranged for 483 citizens waiting for evacuation like hospital patients, residents of social welfare house, etc.. Certain numbers of citizens are waiting in-house voluntarily. Evacuation is almost completed for other people.

(Contact Person)

Mr. Toshihiro Bannai

Director, International Affairs Office,
NISA/METI

Phone:+81-(0)3-██████-██████