

## INCIDENT AND EMERGENCY CENTRE

#### Subject: Status of the Fukushima Daiichi, nuclear power plants.

The Incident and Emergency Centre (IEC) is continuing to monitor the status of the nuclear power plants in Japan following the earthquake.

Based on information received up to 17:00 UTC on March 16, 2011 the following detailed update for the six reactor units at the Fukushima Daiichi nuclear power plant is provided:

#### **Fukushima Daiichi**

#### On-site Radiological situation:

At 21:40 UTC on 15 March a dose rate of 400 milliSv/h was measured near the west side of Unit 3 and 100 milliSv/h near Unit 4. No neutrons were detected.

Included at the end of this status report are two pages of fixed point monitoing data for Fukushima Daiichi (1 F) and Fukushima Daini (2 F). The first row on the table of results for Fukushima Daiichi presents the time (Japanese local time), the second row the gamma dose rate (microSv/h) and neutron dose rates are presented in the third row. N.D. stands for not detected.

The fixed monitoring data presented from the Fukushima Daini monitoring points, should be attributed to the releases from Fukushima Daiichi. All four units at Fukushima Daini are in cold shutdown and there is no indication of any elevated dose rates which can be attributed to Fukushima Daini.

Radiation dose rates, as of 16 March 12:00 UTC, measured at the main gate of the Fukushima Daiichi NPP are shown in Appendix I.

#### Off-site Radiological situation:

The following dose rates were measured off-site between 00:70 and 08:00 UTC on 16 March 2011:

Location	Dose rate (microSv/h)	Dose rate (microSv/h)
	23:00-24:00 UTC 15 March	07:00 - 08:00 UTC 16 March
Miyagi	0.161	0.153
Tokyo	0.089	0.054
Ibaraki	0.962	0.252

Additional off-site dose rate monitoring closer to the site is shown in Appendix II.

#### Implementation of countermeasures

Evacuation of 20 km radius zone around Fukushima Daichi NPP is complete.

Sheltering has been ordered for distances from 20 to 30 km from the NPP.

Stable iodine pills are provided to distribution centres in preparation for administration among the public if deemed necessary.

## Units 1, 2 and 3 Plant Status

The following data was verified on the status of Units 1, 2 and 3 as of 03:25 to 03:40 March 16 (UTC) (underlined are the new available data).

Parameter / Indications	Unit	Fukushima Daiichi		
		Unit 1	Unit 2	Unit 3
Rector Pressure Vessel	MPa	<u>0.207(A)</u>	No Data	<u>0.059</u> (A)
Pressure	IVII a	<u>0.171(B)</u>	<u>140 Data</u>	<u>0.065</u> (B)
Reactor Pressure Vessel Level	mm (above the top of active	<u>-1750(A)</u> -1750(B)	<u>-1400 (A)</u> No Data (B)	-1900(A) -2300(B)
	fuel)	<u>-1730(В)</u>	No Data (B)	<u>-2300(В)</u>
Containment Vessel (Drywell) Pressure	kPa	No Data	400	230
Suppression Pool Temperature	C	No Data	No Data	No Data
Suppression Pool Pressure	kPa	No Data	No Data	No Data
Adding water to Reactor Pressure Vessel	<ul><li>Adding</li><li>Not adding</li></ul>	Adding	Adding	Adding
	Unknown			

<sup>\* (</sup>A) and (B) refer to two measurement channels

For Unit 3, white smoke is confirmed from the reactor building at 23:37 UTC on March 15. Further investigation is in process.

#### Unit 4

A second fire in the reactor building was visually observed at 20:45 UTC on 15 March but no more flame nor smoke can be seen anymore as of 22:26 UTC on the same day.

### Unit 5

At 12:00 UTC on March 15 the water level in Unit 5 had decreased to 201 cm above the top of the fuel. This was a 40 cm decrease in the level since 07:00 UTC. Officials at the plant are planning to use an operational diesel generator in Unit 6 to supply water to Unit 5.

<sup>\*</sup>All pressures shown are in gauge pressure

<sup>\*</sup>Containment vessel (drywell) pressure for Unit 2 in the previous reports have been one tenth of the true value (Correction of data by TEPCO on March 16 15:00 UTC Press Release)

# Spent Fuel Ponds

The temperatures of the water in the spent fuel ponds in Units 4, 5 and 6 have been measured with the results below:

Unit 4	Unit 5	Unit 6
84°C	59.7°C	58.0°C
at 19:08 14-Mar	at 16:00 on 15-Mar	at 16:00 on 15-Mar
84°C	60.4 °C	58.5 °C
at 19:00 15-Mar	at 19:00 on 15-Mar	at 19:00 on 15-Mar
-	62.7 °C at 05:00 16-Mar	60.0 °C at 05:00 on 16-Mar

Emergency Response Manager

Guenther Winkler

16-March-2011 19:45 UTC

IAEA Incident and Emergency Centre

Appendix I: Dose rate measurements near main gate of Fukushima Daiichi



	Doserate at		
	Measurement Point 6		
	(near main gate		
16 March	Fukushima Daiichi		
(UTC)	(microSv/h)		
03:00	4418		
03:10	3188		
03:20	3261		
03:30	10850		
03:40	8234		
03:50	2851		
04:00	2672		
04:10	2536		
04:20	2430		
04:30	2331		
04:40	2257		
04:50	2182		
05:00	2122		
05:10	2059		
05:20	2022		
05:30	1937		
05:40	1888		
05:50	1835		
06:00	1788		
06:10	1752		
06:20	1697		
06:30	1664		
06:40	1629		
06:50	1591		
07:00	1556		
07:10	1530		
07:20	1472		
07.20	11/2		

Appendix II: Off-site dose rate monitoring south west from Fukushima Daiichi

Monitoring	Dose Rate	Weather	Monitor
time	(micro Sv/hr)	condition	
16 March,	9.5	No rain	MEXT
05:15 UTC			
16 March,	0.8	No rain	MEXT
04:53 UTC			
16 March,	1.0	No rain	MEXT
04:52 UTC			
16 March	6.7	No rain	MEXT
04:53 UTC			
16 March	10.5	Snowing	MEXT
04:36 UTC			
16 March	10.0	Snowing	MEXT
04:31 UTC			
16 March	12.2	Snowing	MEXT
04:28 UTC			
	12.5	Snowing	MEXT
16 March	26.0	No rain	JAEA
03:10 UTC			
16 March	10.2	Snowing	MEXT
02:58 UTC			
16 March	80.0	Snowing	MEXT
02:35 UTC			
16 March	80.0	No rain	JAEA
02:30 UTC			
16 March	58.5	Snowing	MEXT
02:23 UTC			
16 March	14.2	No rain	MEST
01:49 UTC			
16 March	12.5	No rain	MEXT
01:17 UTC			
16 March	22.2	No rain	MEXT
16 March	20.0	No rain	MEXT
15 March	18.0	No rain	MEXT
	time  16 March, 05:15 UTC  16 March, 04:53 UTC  16 March, 04:52 UTC  16 March 04:53 UTC  16 March 04:36 UTC  16 March 04:31 UTC  16 March 04:24 UTC  16 March 03:10 UTC  16 March 02:58 UTC  16 March 02:35 UTC  16 March 01:17 UTC  16 March 01:17 UTC  16 March 01:06 UTC  16 March 01:06 UTC	time (micro Sv/hr)  16 March, 05:15 UTC  16 March, 04:53 UTC  16 March 04:53 UTC  16 March 04:53 UTC  16 March 04:36 UTC  16 March 04:31 UTC  16 March 04:24 UTC  16 March 03:10 UTC  16 March 02:58 UTC  16 March 02:35 UTC  16 March 02:35 UTC  16 March 01:49 UTC  16 March 01:49 UTC  16 March 01:49 UTC  16 March 01:17 UTC  16 March 01:17 UTC  16 March 01:00 UTC  16 March 01:17 UTC  16 March 01:00 UTC  16 March 01:17 UTC  16 March 01:17 UTC  16 March 01:00 UTC  16 March 01:17 UTC  16 March 01:17 UTC  16 March 01:17 UTC  16 March 01:00 UTC	time         (micro Sv/hr)         condition           16 March, 05:15 UTC         9.5         No rain           16 March, 04:53 UTC         0.8         No rain           16 March, 04:53 UTC         1.0         No rain           16 March 04:53 UTC         6.7         No rain           16 March 04:53 UTC         10.5         Snowing           16 March 04:36 UTC         10.0         Snowing           16 March 04:28 UTC         12.2         Snowing           16 March 04:28 UTC         12.5         Snowing           16 March 04:24 UTC         26.0         No rain           16 March 03:10 UTC         10.2         Snowing           16 March 02:58 UTC         80.0         Snowing           16 March 02:30 UTC         80.0         No rain           16 March 02:30 UTC         58.5         Snowing           16 March 01:49 UTC         14.2         No rain           16 March 01:49 UTC         12.5         No rain           16 March 01:06 UTC         12.5         No rain