

Japan Earthquake Update (20 March 2011, 21:00 UTC)

<http://www.iaea.org/newscenter/news/tsunamiupdate01.html>

**Summary of Conditions at Fukushima Daiichi Nuclear Power Plant**

Unit 4

All fuel from Unit 4 had been removed from the reactor core for routine maintenance before the earthquake and placed into the spent fuel pool. The building's outer shell was damaged on 14 March, and there have been two reported fires - possibly including one in the area of the spent fuel pool on 15 March - that were extinguished spontaneously.

Authorities remain concerned about the condition of the spent fuel pool, and **Japanese Self Defence Forces began spraying water into the building on 20 March.**

On 18 March, Japan assigned an INES rating of 3 to this site.

**LEGEND**

No Immediate Concern

Concern

Severe Condition

Unit	1	2	3	4	5	6
<b>Power (MWe/th)</b>	460/1380	784/2381	784/2381	784/2381	784/2381	1100/3293
<b>Type of Reactor</b>	BWR-3	BWR-4	BWR-4	BWR-4	BWR-4	BWR-5
<b>Status at Time of Event</b>	In service - auto shutdown following earthquake			Shut down for outage before earthquake		
<b>Core and Fuel</b>	Damaged			No fuel rods	Cold shutdown	
<b>Containment Integrity</b>	No damage reported	Damage suspected	No information	Outage configuration	No damage expected	
<b>Off-site Power</b>	Substation connected	Power center (in Unit) connected	Not available		Not available	
<b>Diesel Generators</b>	Not available				Two emergency diesel generators powering Units 5 and 6	
<b>Building</b>	Severe damage	Slight damage	Severe damage		No damage reported	
<b>Water Level in Reactor Pressure Vessel</b>	About half of fuel assembly (stable)			Outage configuration	Above fuel	
<b>Pressure of Reactor Pressure Vessel</b>	Stabilised	Unreliable data	Elevated	Outage configuration	Stabilised	Stabilised
<b>Containment Pressure Drywell</b>	Stable	Stable	Elevated	Outage configuration	No information	
<b>Water Injection to Reactor Pressure Vessel</b>	Sea water	Sea water	Sea water	Outage configuration	Freshwater injection in progress	
<b>Water Injection to Containment Vessel</b>	Not available			Not necessary		
<b>Spent Fuel Pool Temperature</b>	No information	Spraying from outside	Spraying from outside	Spraying from outside	Cooling restored	

Japan Earthquake Update (20 March 2011, 14:00 UTC)

### Spent Fuel Pools at Fukushima Daiichi Nuclear Power Plant - Updated

#### Unit 4

This reactor was shut down 30 November 2010 for routine maintenance, and all the fuel assemblies were transferred from the reactor to the spent fuel pool, before the 11 March earthquake. The heat load in this pool is therefore larger than the others.

On 14 March, the building's upper floors were severely damaged, possibly causing a reduction of cooling capability in the spent fuel pool. **Emergency workers began spraying water into the building today.**

Japan Earthquake Update (19 March 2011, 4:30 UTC)

### Summary of conditions at Fukushima Daiichi nuclear power plant

#### Unit 4

All fuel had been removed from the reactor core for routine maintenance before the earthquake and placed into the spent fuel pool. A portion of the building's outer shell was damaged by the explosion at Unit 3 on 14 March, and there have been two reported fires - possibly including one in the spent fuel pool on 15 March -- that extinguished spontaneously, **although smoke remained visible on 18 March.**

Authorities remain concerned about the condition of the spent fuel pool.

On 18 March, Japan assigned an INES rating of 4 to this site.

Fukushima Daiichi Summary Table - Units 1-6

**LEGEND**

No Immediate Concern

Concern

Severe Condition

Unit	1	2	3	4	5	6
<b>Power (MWe/th)</b>	460/1380	784/2381	784/2381	784/2381	784/2381	1100/3293
<b>Type of Reactor</b>	BWR-3	BWR-4	BWR-4	BWR-4	BWR-4	BWR-5
<b>Status at the time of event</b>	In service - auto shutdown following earthquake			Shut down for outage before earthquake		
<b>Core and Fuel</b>	Damaged			No fuel rods	No damage expected	
<b>Containment Integrity</b>	No damage reported	Damage suspected	No information	Outage configuration	No damage expected	
<b>Off-site power</b>	Recovery ongoing		Not available			
<b>Diesel generators</b>	Not available				Two emergency diesel generators powering Units 5 and 6	
<b>Building</b>	Severe damage	Slight damage	Severe damage		No damage reported	
<b>Water level in reactor pressure vessel</b>	About half of fuel assembly				Outage configuration	Above fuel
<b>Pressure of reactor pressure vessel</b>	Stable	Unreliable data	Stabilised	Outage configuration	No information	
<b>Containment Pressure Drywell</b>	No information	Stable	Stable	Outage configuration	No information	
<b>Water injection to reactor pressure vessel</b>	Sea water	Sea water	Sea water	Outage configuration	Not necessary	
<b>Water injection to containment vessel</b>	Not available			Not necessary		
<b>Spent fuel pool temperature</b>	No information				Stabilising	