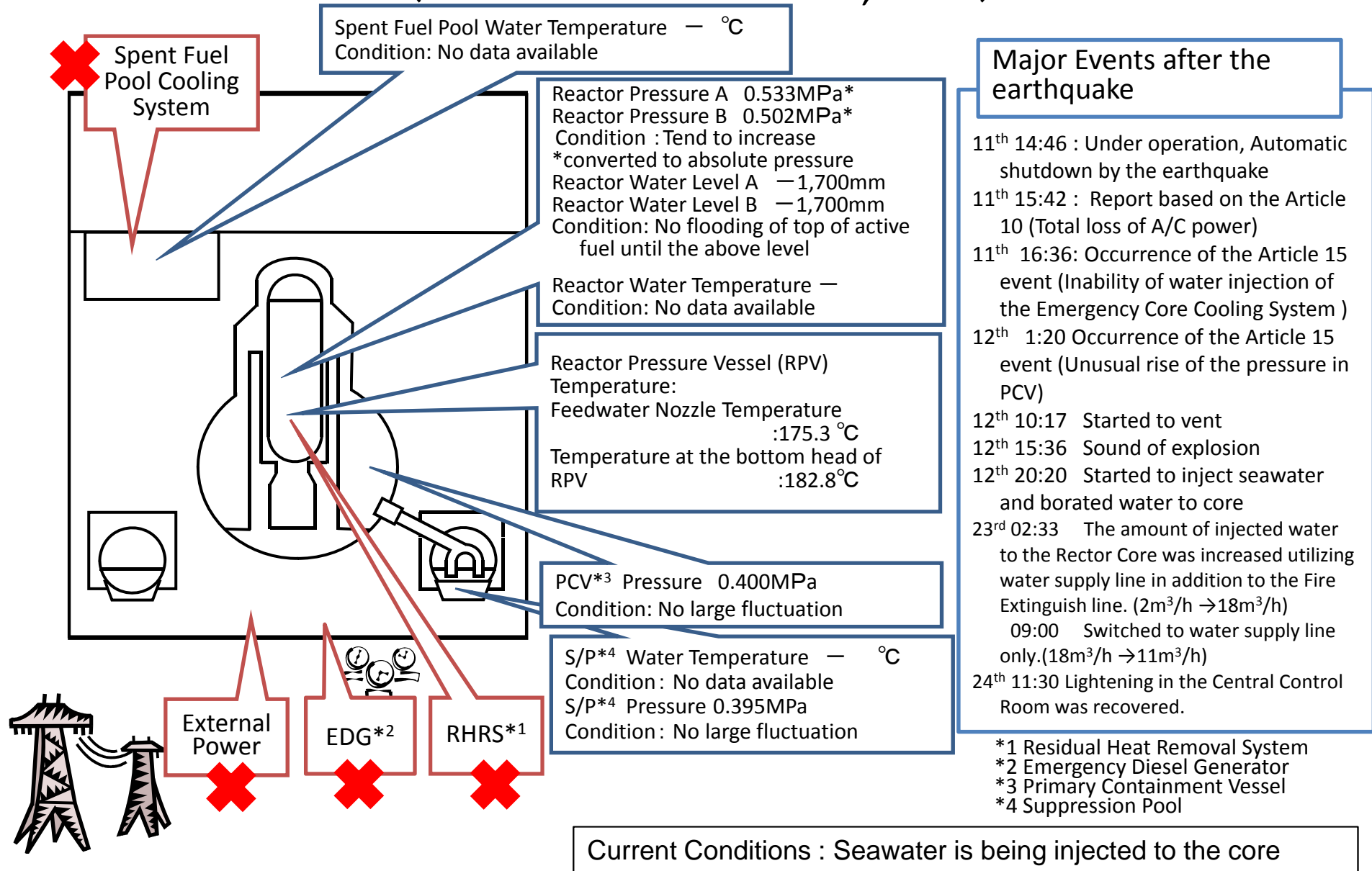
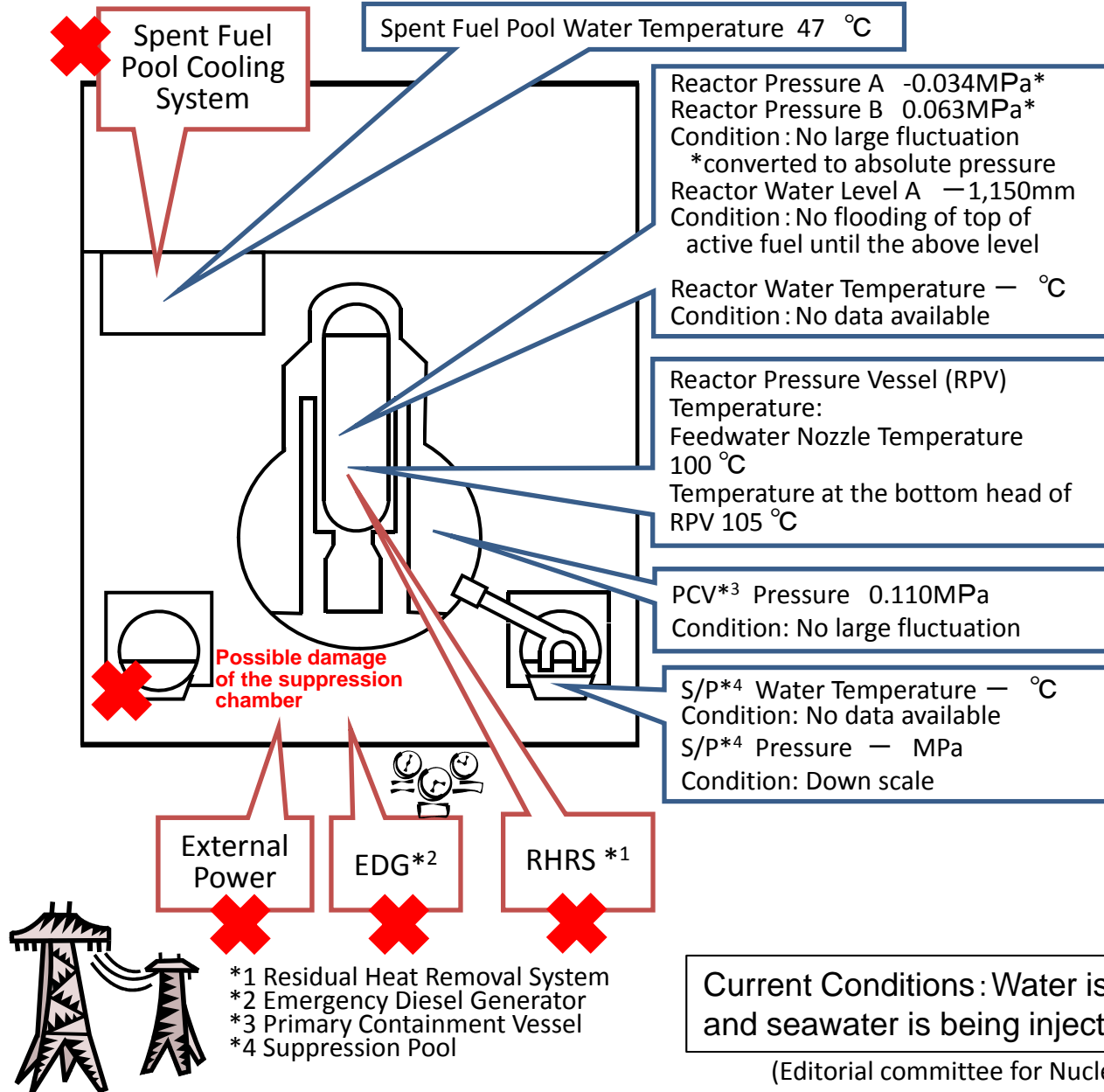


# Conditions of Fukushima Dai-ichi Nuclear Power Station **Unit 1** (As of 11:00 March 24th, 2011)



# Conditions of Fukushima Dai-ichi Nuclear Power Station **Unit 2** (As of 11:00 March 24th, 2011)



## Major Events after the earthquake

- 11<sup>th</sup> 14:46 Under operation, Automatic shutdown by the earthquake
- 11<sup>th</sup> 15:42 Report based on the Article 10 (Total loss of A/C power)
- 11<sup>th</sup> 16:36 Occurrence of the Article 15 event (Inability of water injection of the Emergency Core Cooling System)
- 13<sup>th</sup> 11:00 Started to vent
- 14<sup>th</sup> 13:25 Occurrence of the Article 15 event (Loss of reactor cooling functions)
- 14<sup>th</sup> 16:34 Started to inject water to the Reactor Core
- 14<sup>th</sup> 22:50 Occurrence of the Article 15 event (Unusual rise of the pressure in PCV)
- 15<sup>th</sup> 0:02 Started to vent
- 15<sup>th</sup> 6:10 Sound of explosion
- 15<sup>th</sup> around 6:20 Possible damage of the suppression chamber
- 20<sup>th</sup> 15:05~17:20 Approximately 40 ton seawater injection to the Spent Fuel Pool (SFP) via Fuel Pool Cooling System (FPC)
- 20<sup>th</sup> 15:46 Power Center received electricity.
- 21<sup>st</sup> 18:22 White smoke generated. The smoke died down and almost invisible at 07:11 March 22<sup>nd</sup>.
- 22<sup>nd</sup> 16:07 Injection of around 18 tons of seawater to the Spent Fuel Pool

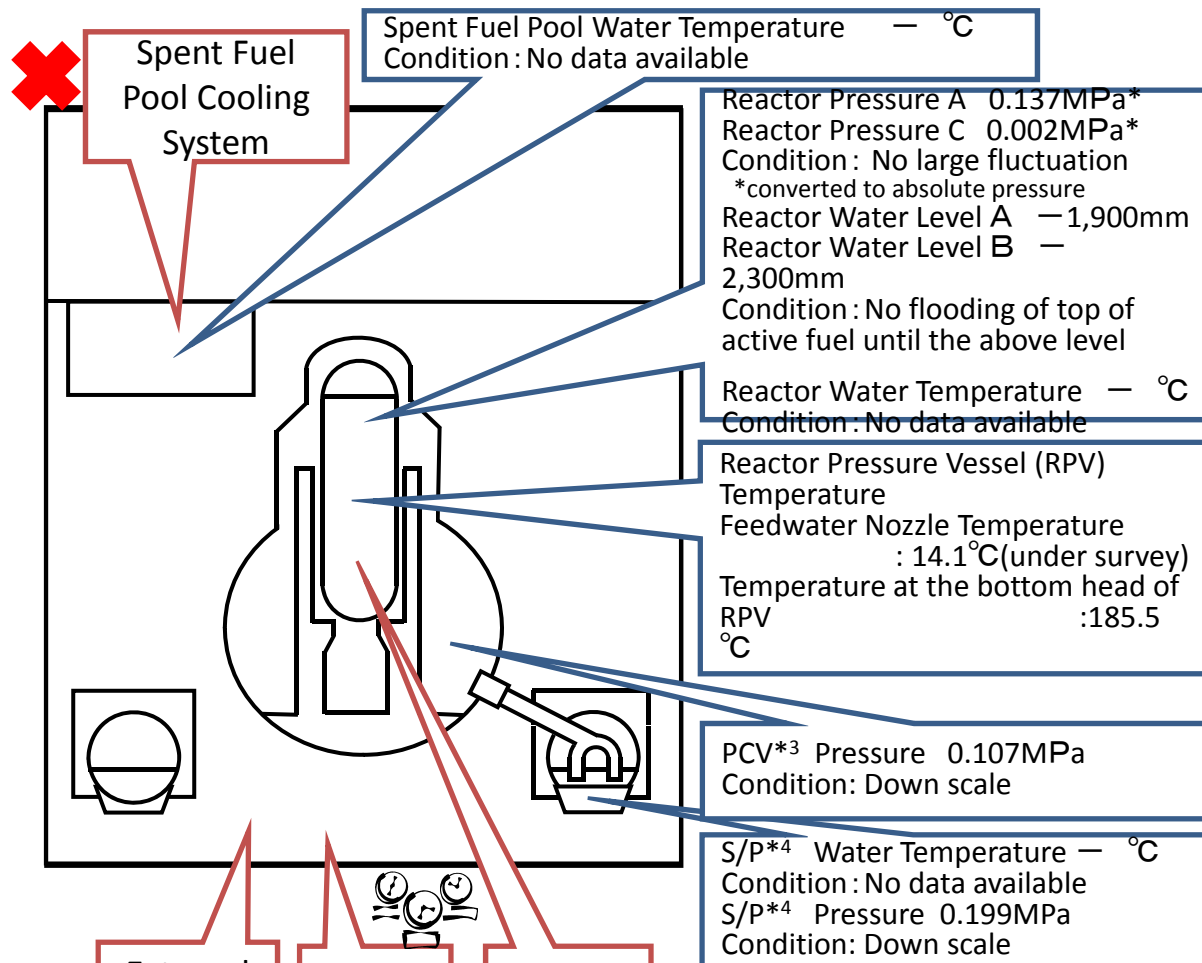
**Current Conditions: Water is being injected to Spent Fuel Pool and seawater is being injected to the core**

(Editorial committee for Nuclear Energy Handbook, Nuclear Energy Handbook)

# Conditions of Fukushima Dai-ichi Nuclear Power Station Unit 3

(As of 11:00 March 24th, 2011)

## Major Events after the earthquake



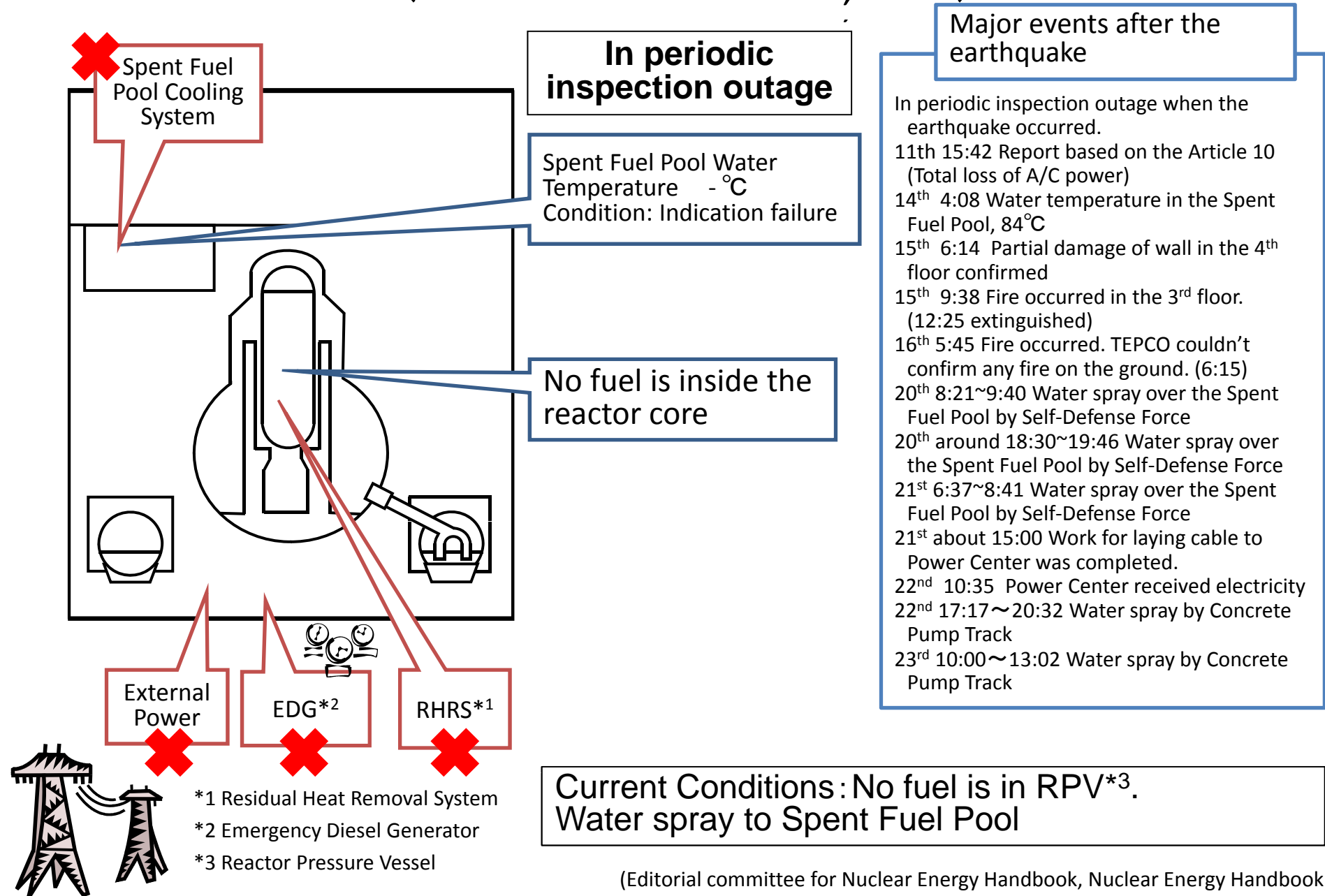
- 11<sup>th</sup> 14:46 Under operation, Automatic shutdown by the earthquake
- 11<sup>th</sup> 5:42 Report based on the Article 10 (Total loss of A/C power)
- 12<sup>th</sup> 20:41 Started to vent
- 13<sup>th</sup> 5:10 Occurrence of the Article 15 event (Inability of water injection of the Emergency Core Cooling System)
- 13<sup>th</sup> 9:20 Started to vent
- 13<sup>th</sup> 13:12 Started to inject seawater and borated water to core
- 14<sup>th</sup> 5:20 Started to vent
- 14<sup>th</sup> 7:44 Occurrence of the Article 15 event (Unusual rise of the pressure in PCV)
- 14<sup>th</sup> 11:01 Sound of explosion
- 16<sup>th</sup> around 8:30 White smoke generated.
- 17<sup>th</sup> 9:48~10:01 Water discharge by the helicopters of Self-Defense Force (4 times)  
19:05~20:07 Water spray from the ground by High pressure water-cannon trucks (Police: once, Self-Defense Force: 5 times)
- 18<sup>th</sup> before 14:00~14:38 Water spray from the ground by 6 fire engines of Self-Defense Force  
~14:45 Water spray from the ground by a fire engine of the US Military
- 19<sup>th</sup> 0:00 ~01:00 Water spray by Tokyo Fire Department
- 19<sup>th</sup> 14:10 ~ 20<sup>th</sup> 3:40 Water spray by Tokyo Fire Department
- 20<sup>th</sup> 11:00 Pressure of PCV rose(320kPa).Afterward fell.
- 20<sup>th</sup> 20:39 ~ 21<sup>st</sup> 3:58 Water spray by Tokyo Fire Department
- 21<sup>st</sup> about 15:55 Grayish smoke generated and was confirmed to be died down at 17:55.
- 22<sup>nd</sup> 15:10 ~ 15:59 Water spray by Tokyo Fire Department
- 22<sup>nd</sup> 22:43 Lightening in the Central Control Room was recovered.
- 23<sup>rd</sup> 11:03 ~13:20 Injection of about 35ton of sea water to the Spent Fuel Pool (SFP) via the Cooling and Purification Line (FPC)
- 23<sup>rd</sup> around 16:20 Black smoke generated and was confirmed to died down at around 23:30 and 24<sup>th</sup> 4:50.
- 24<sup>th</sup> 5:35 Injection of sea water to SFP via FPC (12:08 Confirmed the injection of 4~5t/h)

Current Conditions: Water spray to Spent Fuel Pool and sea water injection to the Reactor Core

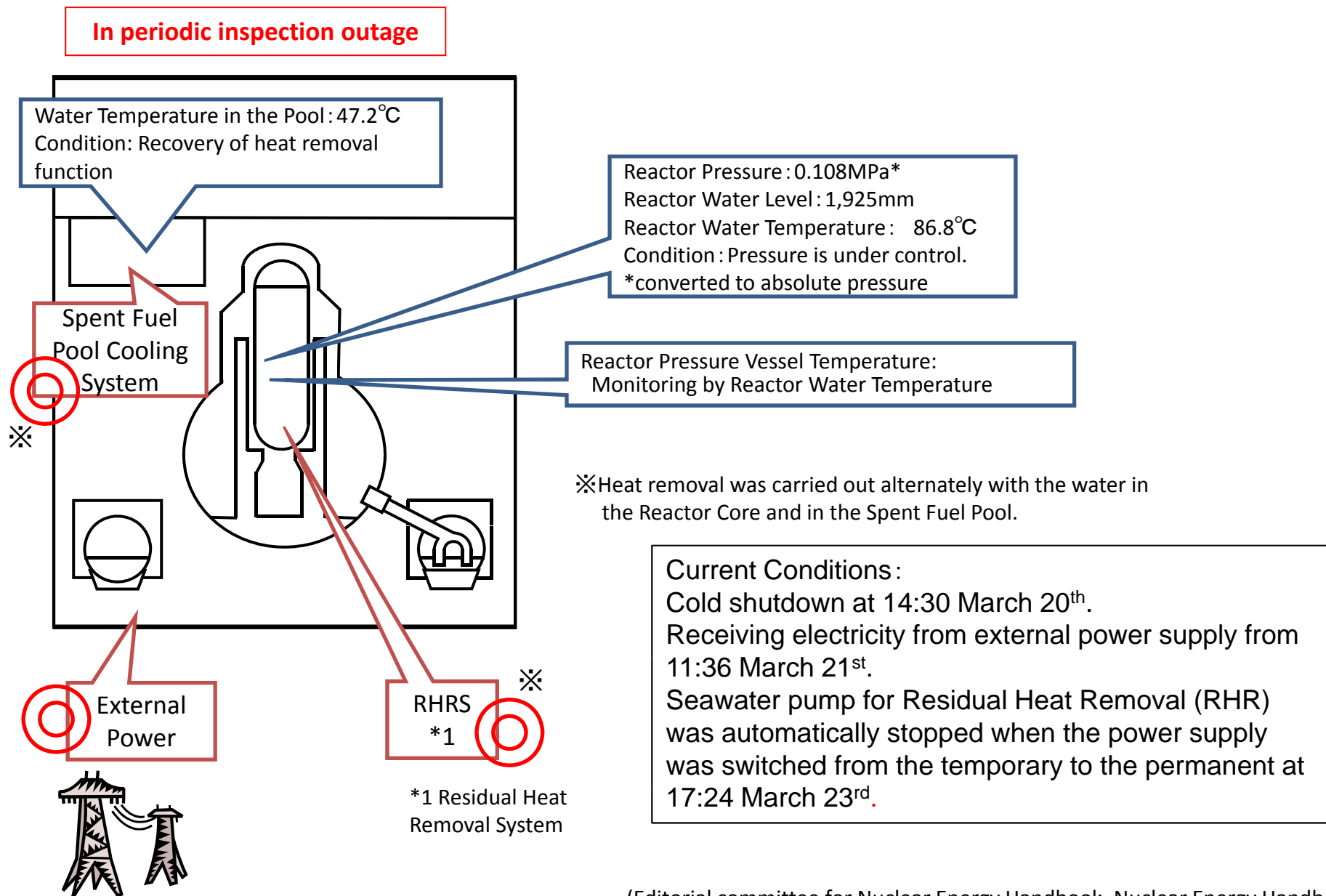
(Editorial committee for Nuclear Energy Handbook, Nuclear Energy Handbook)

\*1 Residual Heat Removal System  
\*2 Emergency Diesel Generator  
\*3 Primary Containment Vessel  
\*4 Suppression Pool

# Conditions of Fukushima Dai-ichi Nuclear Power Station **Unit 4** (As of 11:00 March 24th, 2011)



# Conditions of Fukushima Dai-ichi Nuclear Power Station **Unit 5** (As of 11:00 March 24th, 2011)

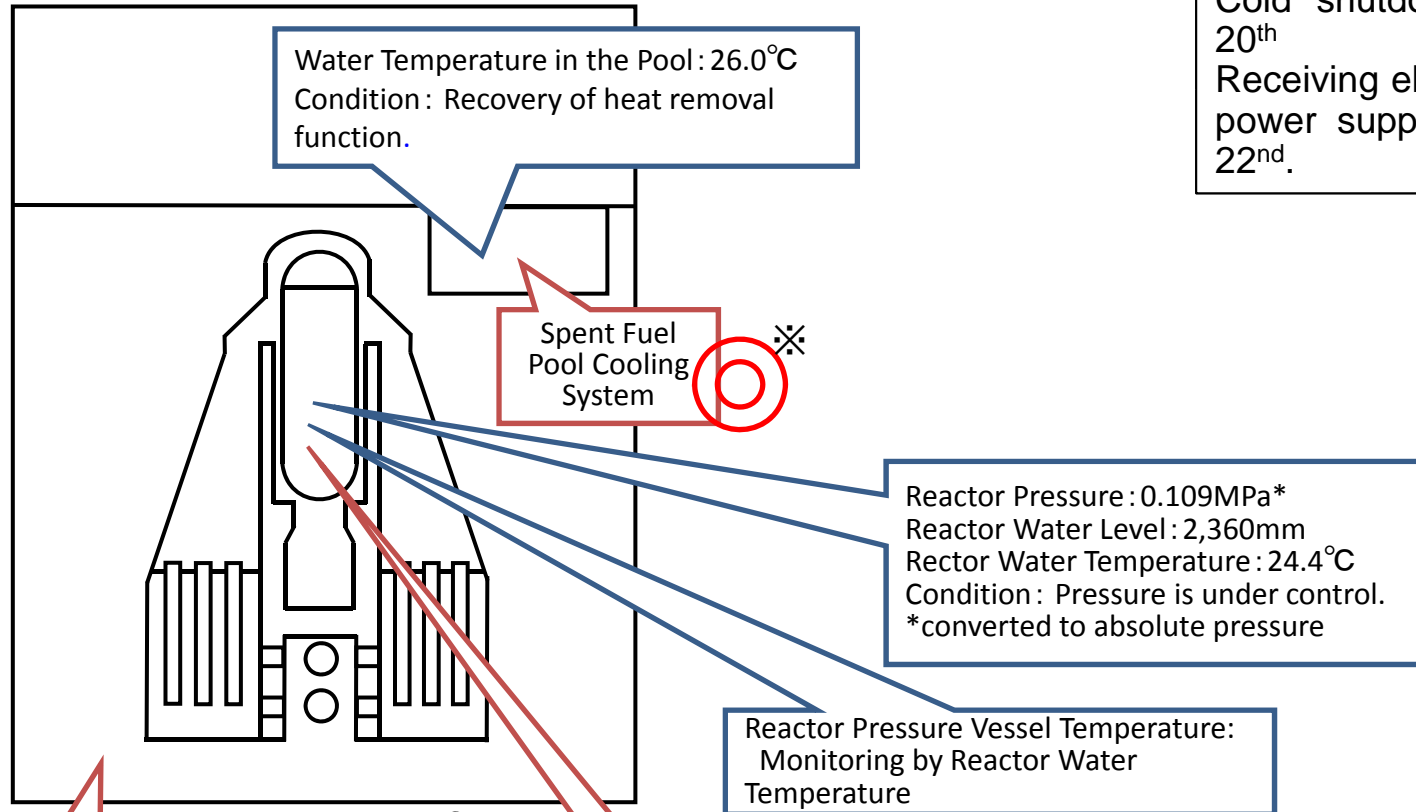


# Conditions of Fukushima Dai-ichi Nuclear Power Station **Unit 6**

(As of 11:00 March 24th, 2011)

**In periodic inspection outage**

Current Conditions:  
 Cold shutdown at 19:27 March 20<sup>th</sup>  
 Receiving electricity from external power supply from 19:17 March 22<sup>nd</sup>.



External Power

RHRS\*1

\*1 Residual Heat Removal System

※Heat removal was carried out alternately with the water in the Reactor Core and in the Spent Fuel Pool.