

**1. Details**

All units of Fukushima Daini Nuclear Power Station were stopped safely with the reactor trip signal sensed that earthquake acceleration was at Tohoku-Chihou-Taiheiyo-Oki Earthquake on March 11, 2011. Afterwards, we have continued the operation for cold shutdown, securing three safety functions of "Shutdown", "Cooling" and "Containment" and one offsite power.

However, from the effect of Tsunami afterwards, as the result of loss of cooling function of Unit 1,2 and 4, the temperature inside Suppression Chamber was over 100 (corresponded to Special Measures Concerning Nuclear Emergency Preparedness). Therefore, declaration of nuclear emergency situation was issued.

Afterwards, we implemented the immediate countermeasures against the emergency and completed cold shutdown of each unit by March 15,2011. We are making effort on completion of the immediate countermeasures to maintain and secure the cold shutdown status until now.

We organized materials regarding the implementation status of the immediate countermeasures against the emergency at Fukushima Daini Nuclear Power Station and will report them to NISA.

**Implementation status of Three functions of "Shutdown", "Cooling" and "Containment"**

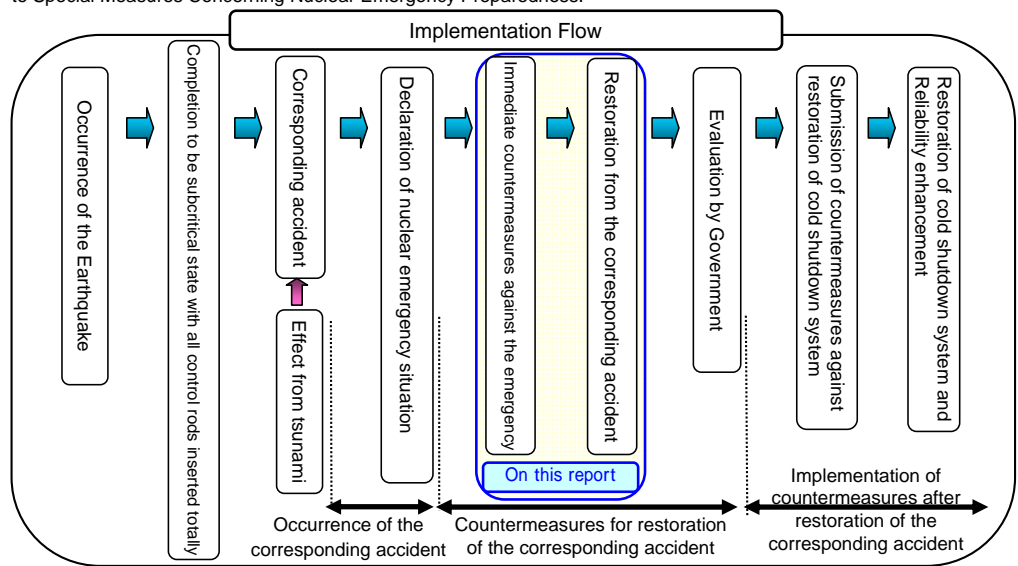
	At the earthquake	At tsunami arrival	At completion of cold shutdown	Now
Shutdown function				
Cooling function		x	(only 1system)	
Containment function				
Secure of offsite power				

- 1 : Three safety functions of "Stop", "Cool" and "Shutdown"  
Prevention towards environmental effect from radiation material and important and necessary function for safety to preserve public environment
- Shutdown function : stop to be subcritical state with all control rods inserted totally (scrum)
  - Cooling function : cool reactor with Residual Heat Removal System
  - Containment function: shutdown radiation materials with primary containment vessel and reactor building

**2. Implementation flow**

We are implementing the immediate countermeasures against the emergency following operational plan for disaster prevention in Fukushima Daini Nuclear Power Station which was made based on Special Measures Concerning Nuclear Emergency Preparedness after the accident corresponding to Special Measures Concerning Nuclear Emergency Preparedness .

In this report, the immediate countermeasures against the emergency and restoration from the accident corresponding to Special Measures Concerning Nuclear Emergency Preparedness.



**3. Implementation status of the immediate countermeasures against the emergency at Fukushima Daini Nuclear Power Station**

**(1)Requirements**

In order to secure reliability on cooling function which was lost at the earthquake, it is necessary to restore more than two systems of cooling facilities of reactor, cooling facility for spend fuel pool, emergency power facility which supplies power to residual heat removal system.

**(2)Implementation status**

As of now, the implementation status of cooling facility for reactor and spend fuel pool and the restoration status of emergency power facility are shown as below. The status of all units is content with all the requirements since July 17.

Fukushima Daini Nuclear Power Station	Reactor Cooling Facility			Cooling Facility for spend fuel pool	Emergency Power Facility	
	Residual Heat Removal		Clean Up Water System		Residual Heat Removal	
	(A) system	(B) system			(A) system	(B) System
Unit 1	To be restored in the middle of November	Restored on Mar. 14	Restored on Jul.16	Restored on Mar.16	In restoration <sup>2</sup> (to be restored from (B) system in the middle of November)	Restored on Jul. 15
Unit 2	Restored on Aug.6	Restored on Mar.14	Restored on Jul.17	Restored on Mar.16	Restored on Aug.8	Restored on Mar.19
Unit 3	Restored on Aug.30	No damage	Restored on Jun.6	Restored on Mar.15	Restored on Aug.31	No damage
Unit 4	Restored on Aug. 2	Restored on Mar.14	Restored on Jun.4	Restored on Mar.15	Restored on Aug.3	Restored on Mar.21

- 2 : Emergency power facility of Unit:  
As for the facility B, it is possible to supply from emergency power facility A and B of Unit 2 as alternative power and from emergency power facility B of Unit 3. We secure the reliability of emergency power facility.

As the countermeasures towards flood damage caused by tsunami, we are implementing the construction of water sealing for doors in reactor building which has important facility and the expansion of embankments (to be finish in the end of November). Moreover, we conducted installation of power vehicle and training for emergency in order to secure more safety.

**(3) Evaluation of implementation status**

Since we proceeded the immediate countermeasures against the emergency, Fukushima Daini Nuclear Power Station is now evaluated to be safe situation securing cooling function as shown above.

**4. Radiation control**

Regarding countermeasures towards radiation materials,  
The maintenance of "Containment" function is completed.  
The analysis result of reactor water, spent fuel pool water and waste water does not show irregular value.  
The indicated value of monitoring posts and exhaust stack monitor fluctuates in line with the radiation dose measured in Fukushima Daiichi Nuclear Power Station.  
From above reasons, we judged that at the occurrence of the accident there was no outside influence by radioactive materials.

**5. Future plan**

We will implement recovery measure of equipment for maintaining safety cold shut down of the plant, and make efforts to improve reliability.