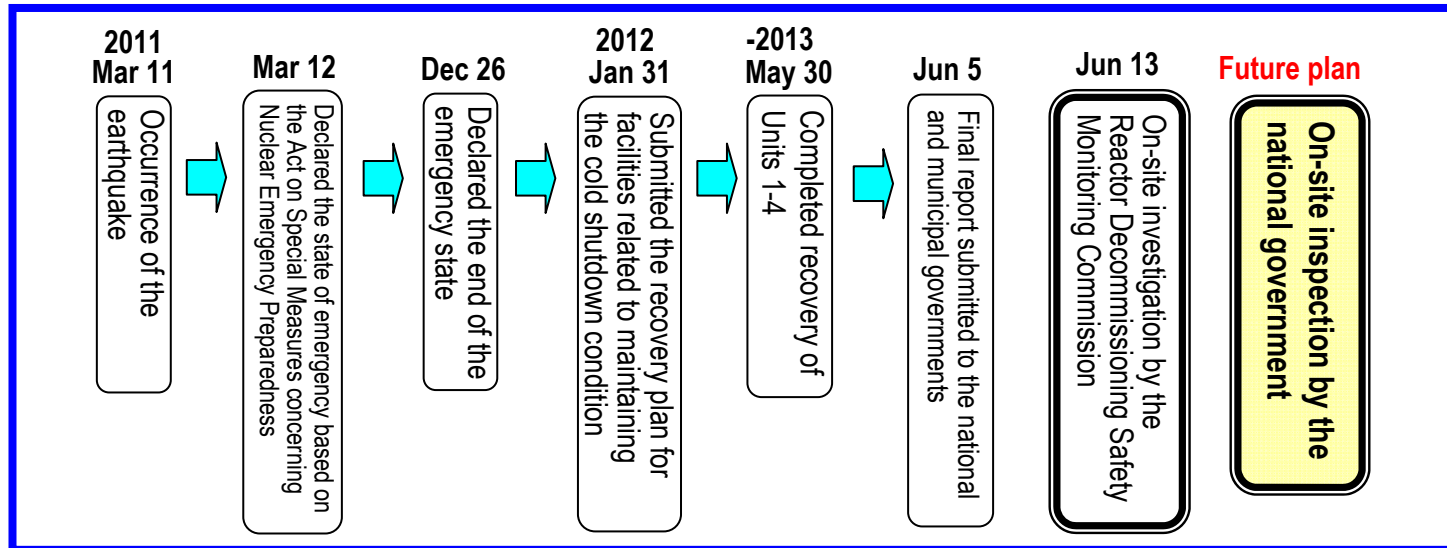


Current status of Fukushima Daini Nuclear Power Station (July 2013)

July 12, 2013
Tokyo Electric Power Company
Fukushima Daini Nuclear Power Station

- At the Fukushima Daini Nuclear Power Station, all Units achieved cold shutdown on March 15, 2011 immediately after the earthquake, and have maintained the cold shutdown condition.
- The recovery of facilities related to maintaining the cold shutdown condition has progressed and was completed for all Units on May 30, 2013.
- On June 13, an on-site investigation was conducted by the Safety Monitoring Commission concerning the Reactor Decommissioning of Fukushima Daini Nuclear Power Station (hereinafter referred to as the "Reactor Decommissioning Safety Monitoring Commission"). Subsequently, an on-site inspection by national government will be conducted.

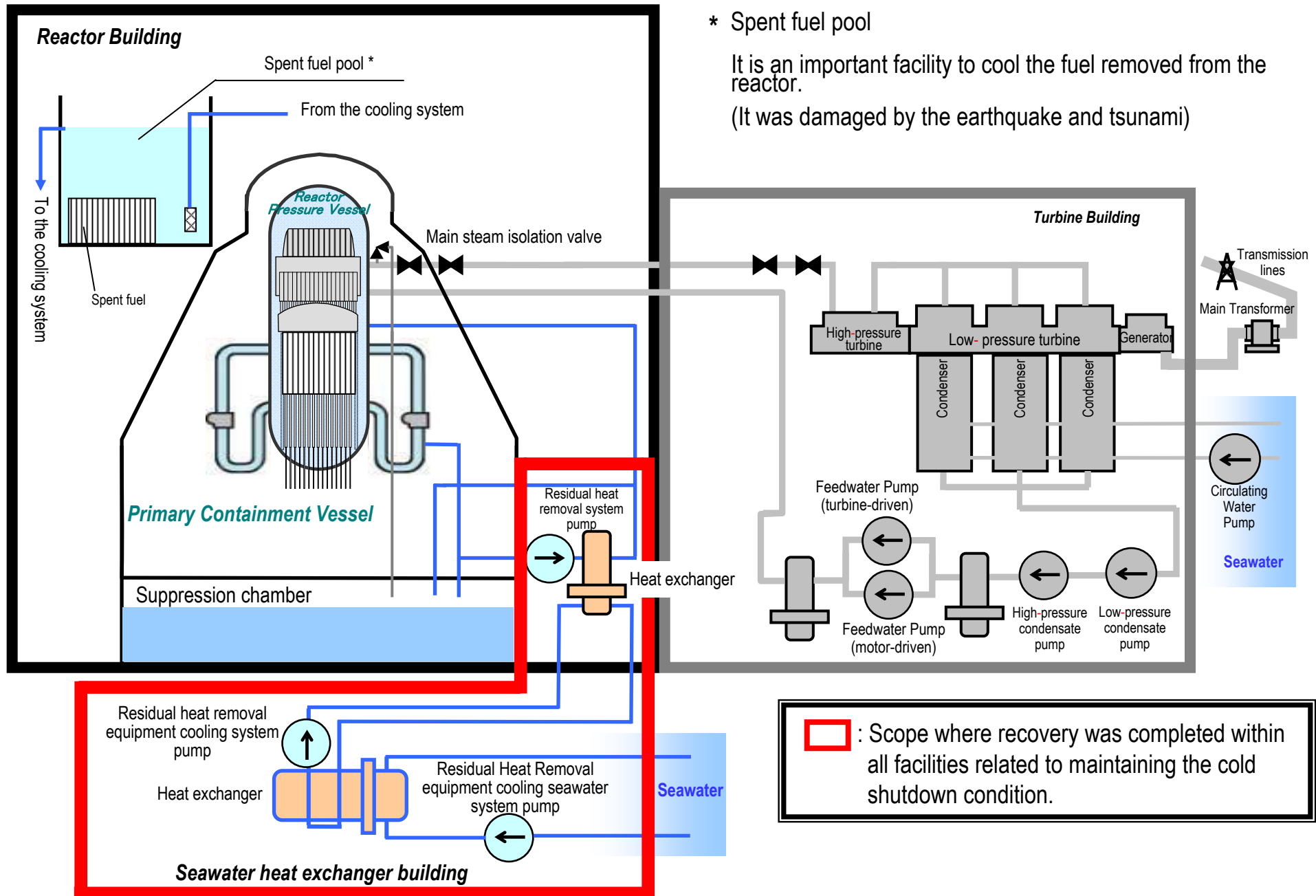


© Fukushima Daini Nuclear Power Station will continue to maintain the "cold shutdown" condition.

"Cold shutdown" is defined as a condition whereby the temperature of the reactor water is maintained at less than 100°C, an appropriately lower level compared to that during normal operation (approx. 280°C), pursuant to safety regulations.

Any damage affecting fuel safety may result in the release of radioactive materials. We consider it important to ensure the safety of the nuclear power station, maintain the cold shutdown condition to eliminate any potential concerns, and continue to cool the fuel.

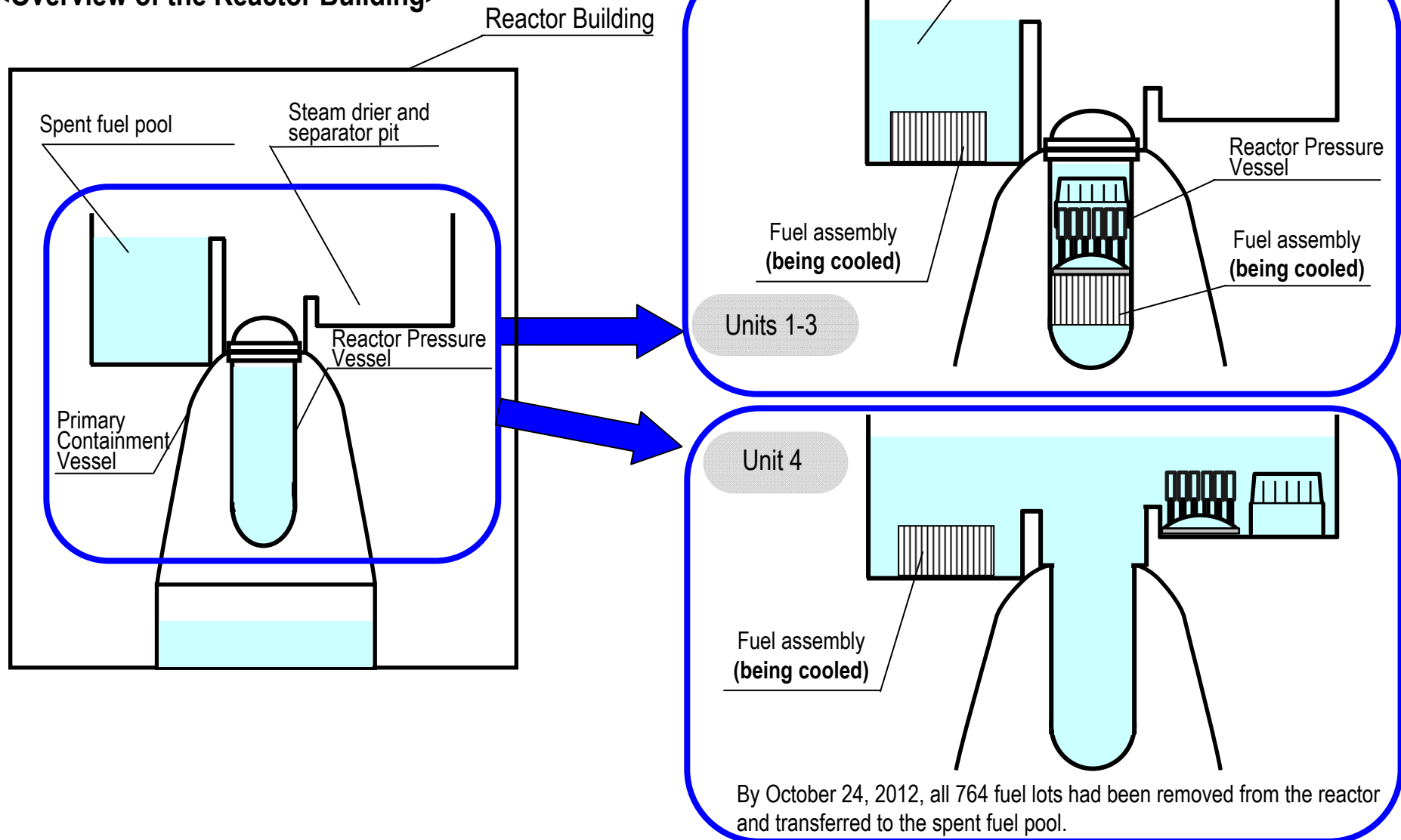
1. Recovery status of facilities related to cold shutdown



2. Status of the plant (as of June 30)

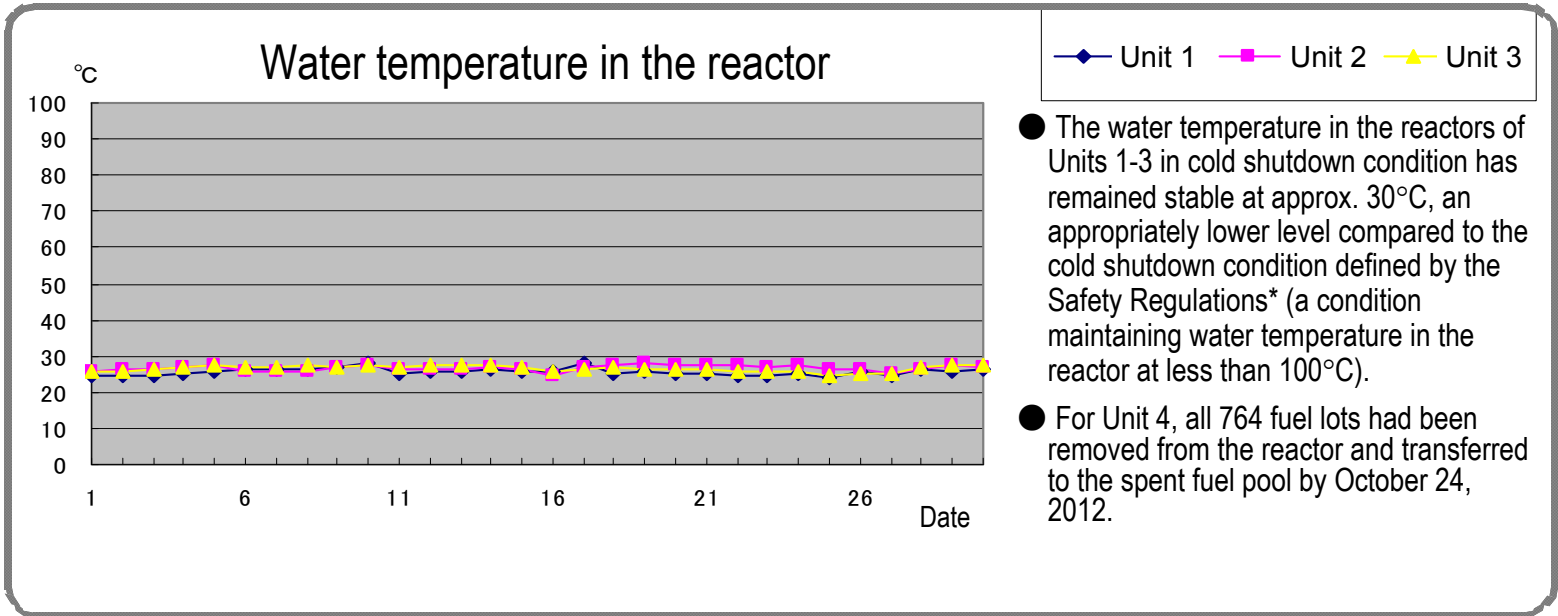
- Units 1-3 have maintained the stable cold shutdown condition.
- For Unit 4, fuel removal from the reactor was completed and the fuel has been stably cooled in the spent fuel pool.

<Overview of the Reactor Building>

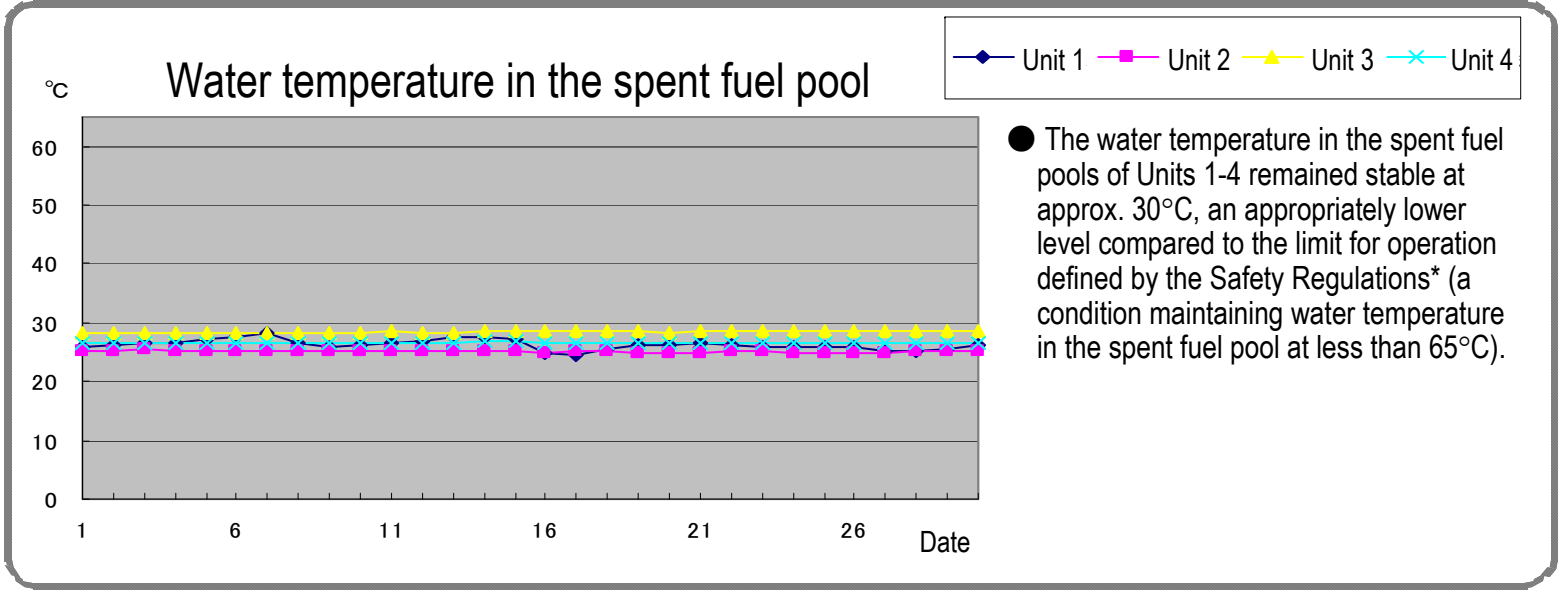


3. Trend of water temperature in the reactor and spent fuel pool (June)

● The water temperature in the reactor and spent fuel pool has remained been stable.



* Safety Regulations
Stipulate the basic items to be complied with to ensure the safe operation of the Nuclear Power Station (operational management, fuel management, radioactivity management, emergency actions, etc.).



4. Status of training to accelerate response in the case of a station blackout

- Fukushima Daini Nuclear Power Station currently maintains a cold shutdown condition. However, in the case of a station blackout where cooling of the reactor is stopped, the estimated rate of increase of the water temperature in the reactor is approx. 0.8 to 1.0°C per hour and the estimated time before the temperature reaches 100°C, the defined cold shutdown limit, is approx. 70 to 80 hours.
- For the spent fuel pool, if cooling were stopped, the estimated rate of increase of the water temperature in the pool is approx. 0.2 to 0.4°C per hour and the estimated time before the temperature reaches 65°C, the limit defined by the Safety Regulations, is approx. 100 to 200 hours.
- To promptly recover and maintain water injection into reactors and spent fuel pools as well as ensure a heat removal function, power supply cars, air-cooled gas turbine power generator cars, and fire engines are deployed. In addition, training is conducted using these vehicles to ensure a power supply, and using the fire engines to inject fresh and sea water into the reactors and spent fuel pools.

<Training to provide water supply using a power supply car>

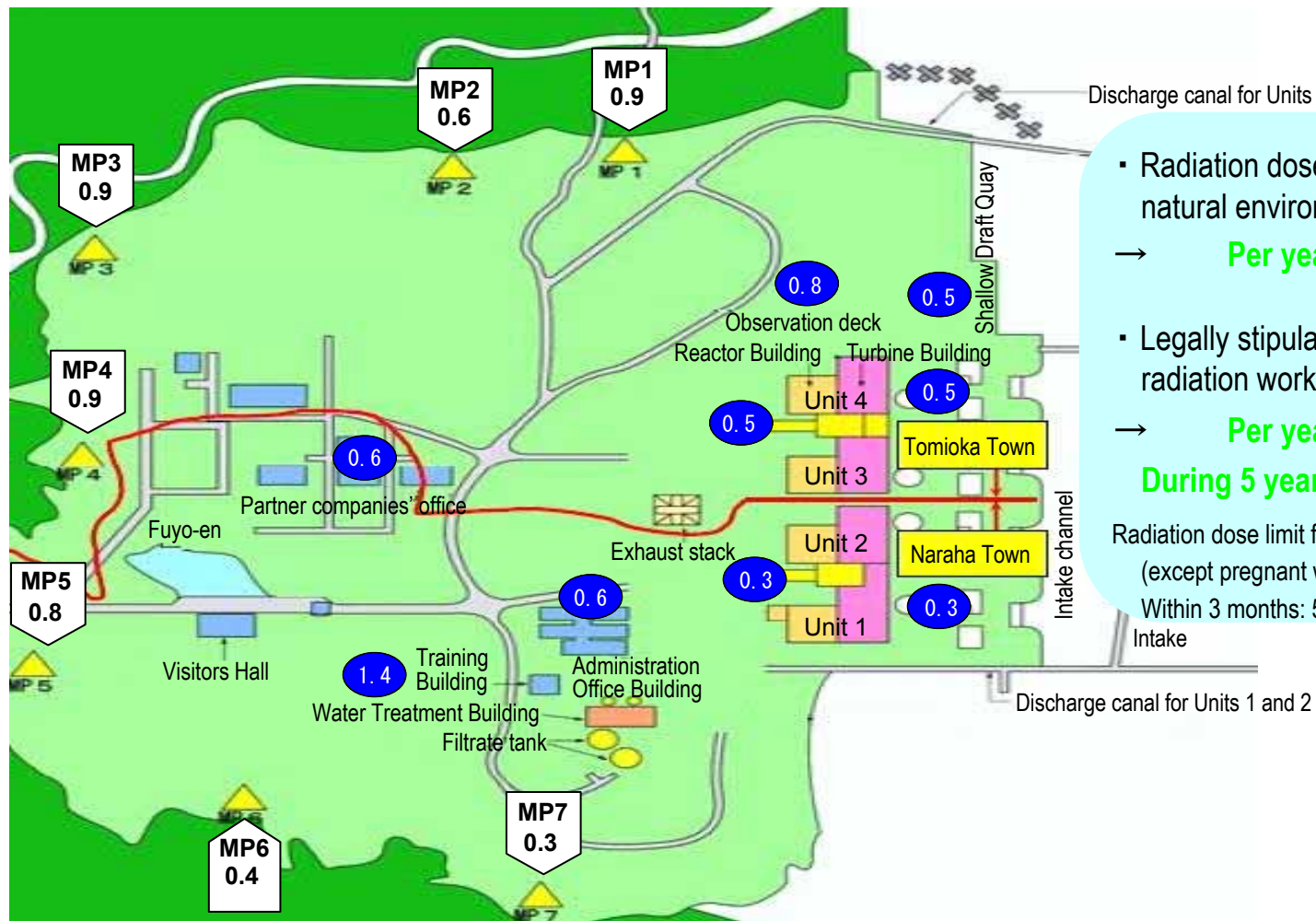


<Training to inject water into reactors and spent fuel pools>



5. Air radiation dose rate around and within the power station site

- Measurement devices called Monitoring Posts (MPs) were installed at 7 points near the boundaries of the power station to continuously measure and monitor the air radiation dose rate (radiation volume per hour) and confirm that there was no fluctuation caused by the power station.
The measurement results are posted on the website of TEPCO.
<TEPCO's website of the radiation dose rate status> <http://www.tepco.co.jp/nu/fukushima-np/f2/index-j.html>
- The air radiation dose is also measured regularly within the power station site to identify the work environment.



▪ Radiation dose general people receive from the natural environment (average in Japan)

→ **Per year: 2.1 mSv**

▪ Legally stipulated radiation dose limit for radiation workers

→ **Per year: 50 mSv**

During 5 years: 100 mSv

Radiation dose limit for females (except pregnant women)
Within 3 months: 5 mSv

⬠ : Measured on June 30

● : Measured from June 14-18

Unit: $\mu\text{Sv}/\text{hour}$

* mSv = 1,000-fold of μSv

Topics 1

Fuel transfer (from the reactor to the spent fuel pool)

- Targeting ease of maintenance of facilities*1, Fukushima Daini Nuclear Power Station is transferring fuel in reactor Units 1 - 3 to the spent fuel pool by fiscal 2014.

*1 By centrally managing fuel in the spent fuel pools, further improvement is expected in safe management.

Schedule related to fuel transfer

Unit	Work item	FY2013	FY2014
Unit 1	Inspection of fuel transfer-related facilities	[Blue bar]	
	Opening of the reactor*2 and fuel transfer		[Orange bar]
Unit 2	Inspection of fuel transfer-related facilities	[Blue bar]	
	Opening of the reactor and fuel transfer	[Orange bar]	
Unit 3	Inspection of fuel transfer-related facilities	[Blue bar]	
	Opening of the reactor and fuel transfer		[Orange bar]
Unit 4	Inspection of fuel transfer-related facilities	[Cyan bar]	
	Opening of the reactor and fuel transfer	Completed in FY2012	

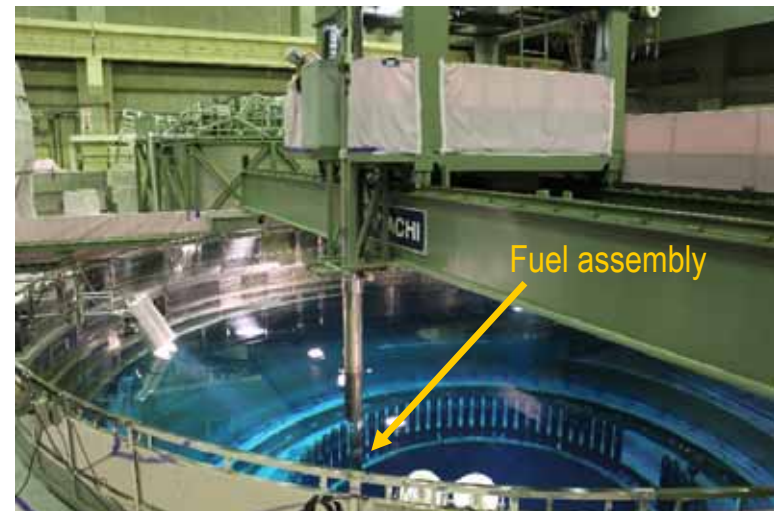
*2 Work prior to the fuel transfer, to remove the cap of the Reactor Pressure Vessel and remove the steam drier and separator from the reactor.

● Fuel transfer of Unit 2

Inspection for of related to reactor opening and fuel transfer was completed by July 10 and their safety was confirmed. Subsequently, after preparation is completed, the reactor opening and fuel transfer will be started.

<Inspection status of related facilities>

- Reactor Building overhead crane: completed on April 10, 2013 (NAD)
- Fuel Handling Machine: completed on June 20, 2013 (NAD)
- Spent fuel storage rack: completed on July 10, 2013 (NAD)



Fuel removal from the reactor
[photo of the fuel transfer of Unit 4]
(taken on October 1, 2012)

Topic 2

On-site investigation by the "Reactor Decommissioning Safety Monitoring Commission"

- On June 13, 2013, an on-site investigation associated with the recovery completion of facilities related to maintaining the cold shutdown condition was conducted, in which comments such as "in general, the necessary measures have been taken to maintain the cold shutdown condition" were heard.

● On-site investigation



Prior explanation by TEPCO



Emergency diesel generator (diesel engine)
(in the 2nd basement of the Reactor Building Annex)



Emergency diesel generator (generator)
(in the 2nd basement of the Reactor Building Annex)



Residual Heat Removal equipment cooling system pump
(on the 1st floor of the Seawater Heat Exchanger Building)