Information on Status of Nuclear Power Plants in Fukushima



Japan Atomic Industrial Forum, Inc.

Policy on information and compilation

This JAIF-compiled information chart represents the situation, phenomena, and operations in which JAIF estimates and guesses the reactors and related facilities are, based on the latest data and information directly and indirectly made available by the relevant organizations when JAIF's updating works done. Consequently, JAIF may make necessary changes to descriptions in the chart, once (1) new developments have occurred in the status of reactors and facilities and (2) JAIF has judged so needed after reexamining the prior information and judgments.

JAIF will do its best to keep tracks on the information on the nuclear power plants quickly and accurately.

Status of nuclear power plants in Fukushima as of 12:00, May 15th (Estimated by JAIF)

	T		E								
Power Station			Fukushima Dai-ichi Nuclear Power Stati	on I	_						
Unit (The LD (AMA))	1	2	3	4	5	6					
Electric / Thermal Power output (MW)	460 / 1380	784 / 2381	784 / 2381	784 / 2381	784 / 2381	1100 /3293					
Type of Reactor	BWR-3	BWR-4	BWR-4	BWR-4	BWR-4	BWR-5					
Operation Status at the earthquake occurred	In Service → Shutdown	In Service → Shutdown	In Service → Shutdown	Outage	Outage	Outage					
Fuel assemblies loaded in Core	400	548	548	No fuel rods	548	764					
Core and Fuel Integrity (Loaded fuel assemblies)	Damaged (55%*1)	Damaged (35%*1)	Damaged (30%*1)	No fuel rods	Not Da	maged					
Reactor Pressure Vessel structural integrity	Damage and Leakage Suspected	Unknown	Unknown	Not Damaged	Not Da	ımaged					
Containment Vessel structural integrity	Damage and Leakage Suspected	Damage and Leakage Suspected	Not damaged (estimation)	Not Damaged	Not Da	ımaged					
Core cooling requiring AC power 1 (Large volumetric freshwater injection)	Not Functional	Not Functional	Not Functional	Not necessary	Func	tional					
Core cooling requiring AC power 2 (Cooling through Heat Exchangers)	Not Functional	Not Functional	Not Functional	Not necessary	Funct (in cold s	ioning hutdown)					
Building Integrity	Severely Damaged (Hydrogen Explosion)	Partly opened	Severely Damaged (Hydrogen Explosion)	Severely Damaged (Hydrogen Explosion)	Open a vent hole avoiding hydro						
Water Level of the Rector Pressure Vessel	Lower than the bottom of fuels	Fuel exposed partially or fully	Fuel exposed partially or fully	Safe	Sa	ıfe					
Pressure / Temperature of the Reactor Pressure											
Vessel	after increasing over 400°C on Mar. 24th	Unknown / Stable	Unknown / Gradually increasing	Safe	Sa	ife 					
Containment Vessel Pressure	Decreased a little after increasing up to 0.4Mpa on Mar. 24th	Stable	Stable	Safe	Sa	ıfe					
Water injection to core (Accident Management)	Continuing(Switch from seawater to freshwater)	Continuing (Switch from seawater to freshwater)	Continuing (Switch from seawater to freshwater)	Not necessary	Not ne						
Water injection to Containment Vessel (AM)	Feed water to fill up the CV (started 4/27)	Feed water to fill up the CV (planned)	Feed water to fill up the CV (planned)	Not necessary	Not ne	cessary					
Containment Venting (AM)	Temporally stopped	Temporally stopped	Temporally stopped	Not necessary	Not ne	cessary					
Fuel assemblies stored in Spent Fuel Pool	292	587	514	1331	946	876					
Fuel Integrity in the spent fuel pool	Unknown	Unknown	Damage Suspected	some of the spent fuel may have been damaged*3	Not Da	ımaged					
Cooling of the spent fuel pool	Water spray continues (freshwater)	water injection continues (Switch from seawater to freshwater) Water spray and injection continues (Switch from seawater to freshwater) Water spray and injection continues (Switch from seawater to freshwater), Hydrogen from the pool exploded (3/15)		Pool cooling capability was recovered							
Main Control Room Habitability & Operability	Poor due to loss of AC power	Lighting and parmaeter monitoring restore	d in the control room at Unit 1 and 3 on Mar. 24th, a	at Unit 2 on Mar. 26th. at Unit 4 on Mar. 29th)	Not damage	d (estimate)					
Environmental effect Influence to the people's life Radioactive material was detected from milk, agricultural products and seafood from Fukushima and neighboring prefectures. The government issued order to limit shipment and intake of some products. Radioactive iodine, exceeding the provisional legal limit for drinking water, was detected from tap water sampled in some prefectures. All the restrictions of intake of the water, which was once issued by the govedrment, have been lift 10th. Radioactive cesium was detected in the sludge from a sewage treatment plants, one of which is 50 km far from the power station. Small amount of strontium was detected in some samples of soil and plants collected in the area 20–80 km away from the power station. (1) Shall be evacuated for within 3km from NPS, Shall stay indoors for within 10km from NPS (issued at 21:23, Mar. 11th) <2> Shall be evacuated for within 10km from NPS (issued at 05:44, Mar. 12th)						<u> </u>					
Evacuation	around the Fukushima Daiichi NPS is to be exp 30km and other than the expanded evacuation	panded so as to include the area, where ann area mentioned above, are asked to get pre	ual radiation exposure is expected to be above 20mSv pared for staying indoors or evacuation in an emergen	. People in the expanded zone are ordered to evacuate with		<3> Shall be evacuated for within 20km from NPS (issued at 18:25, Mar. 12th) <4> Shall stay indoors (issued at 11:00, Mar. 15th), Should consider leaving (issued at 11:30, Mar. 25th) for from 20km to 30km from NPS <5>The 20km evacuation zone around the Fukushima Daiichi NPS is to be expanded so as to include the area, where annual radiation exposure is expected to be above 20mSv. People in the expanded zone are ordered to evacuate within a month or so. People living in the 20 to 30km and other than the expanded evacuation area mentioned above, are asked to get prepared for staying indoors or evacuation in an emergency (announced on Apr. 11th and issued on Apr. 22nd).					
INES (estimated by NISA)	Level 7*2		hed the level to be classified as level 7. as much as one in the Chernobyl accident so far.	Level 3 *2	_						
ı	Progress of the work to restore cooling function TEPCO announced its plan to bring the damaged reactors to a stable condition known as a "cold shutdown" in about six to nine months, a situation in which water temperatures inside the reactors have been stably brought below 100 C.(4/17) High radiation circumstance hampering the work to restore reactor cooling function at unit-1,2 and 3. Operation to discharge radioactive water in the basement of the buildings and concrete tunnels outside the buildings of all Unit 1, 2, 3, started with unit 2 on April 19 and counties. Works inside the reactor Didg becomes available after radiation inside were forcibly decreased through air purification. Instrumental reading of the water gage of the reactor No1 went off the scale on the lower side after adjusting the gage. Emergency power generators were moved to higher ground in order to prevent the reactors' cooling systems from falling in case a major tsunami hits the plant again. External power source becomes more reliable after connecting 3 power lines with each other, which are for Unit 1/2, for Unit 3/4 and for Unit 5/6. The damaged containment vessel of unit 2 is need to be repaired before the work to restore reactor cooling function. TEPCO developed the plan to cool the reactor through filling the containment vessel with water up to the top of fuel level. The operation of pumping more water into No1 reactor in line with this plan continues. In response to the temperature increase of the reactor pressure vessel, water injection flow to the vessel has been inreased while switching the injection line from the fire extingushing line to the feed water linel at Unit 3 (5/4-). © Function of containing radioactive material It is pressumed that radioactive material inside the reactor vessel may leaked outside. NISA estimated that the reactor pressure vessel of Unit 2 and 3 may have lost air tightness. Nitrogen gas injection into the Unit 1 containment vessel to prevent hydrogen explosion started on April 5th at an optimized										
Remarks	TEPCO announced its plan to bring the damag High radiation circumstance hampering the wowith unit 2 on April 19 and counties. Works inside the reactor bldg becomes available Instrumental reading of the water gage of the reactor of the each other, which are for Unit 1/2, for Unit 3/2. The damaged containment vessel of unit 2 is not a tree to the temperature increase of the plan to cool the reactor of the each other, which are for Unit 1/2, for Unit 3/2. The damaged containment vessel of unit 2 is not not to the reactor of the each other, which are for Unit 1/2, for Unit 3/2. The damaged containment vessel of unit 2 is not not not not not be unit 1 to reactor of the each of the reactor of the Unit 1 containment of the spent fuel pool (SFP). Injecting and/or spraying water to the SFP contains and of the reactor building supporting the expection of the proliferation of radioactive TEPCO announced the plans to prevent radioactive full operation of spraying synthetic resin to contain the plans to prevent radioactive full operation of spraying synthetic resin to contain the plans to prevent radioactive full operation of spraying synthetic resin to contain the plans to prevent radioactive full operation of spraying synthetic resin to contain the plans to prevent radioactive full operation of spraying synthetic resin to contain the plans to prevent radioactive full operation of spraying synthetic resin to contain the plans to prevent radioactive full operation of spraying synthetic resin to contain the plans to prevent radioactive full operation of spraying synthetic resin to contain the plans to prevent radioactive full operation of spraying synthetic resin to contain the plans to prevent radioactive full operation of spraying synthetic resin to contain the plans to prevent radioactive full operation of spraying synthetic resin to contain the plans to prevent radioactive full operation of the plans to prevent radioactive full operation of the plans to prevent radioactive full operation of the plans to prevent radioact	ged reactors to a stable condition known as a rk to restore reactor cooling function at unit are let after radiation inside were forcibly decreal reactor No1 went off the scale on the lower higher ground in order to prevent the reactor 4 and for Unit 5/6. The ed to be repaired before the work to restor through filling the containment vessel with the reactor pressure vessel, water injection flow the reactor vessel may leaked outside. NISA ent vessel to prevent hydrogen explosion stabling was started at Unit 1 (5/13). Operation on times for the purpose of cooling and make the pool were severely damaged by an explosively contaminated substance: The actively contaminated water, dust and soil are contain contaminated dust started on Apr. 26	t=1,2 and 3. Operation to discharge radioactive water in the seed through air purification. side after adjusting the gage. res' cooling systems from failing in case a major tsuname are reactor cooling function. water up to the top of fuel level. The operation of pure to the vessel has been inreased while switching the cooling arted on April 6th and continues. In for Installing the the cover over the building is scheduling up water evaporated. Corrosion inhibitor, Hydrazin on on March 15th at unit-4. Work for structural reinformed radioactive material itself existing on site from spread.	i hits the plant again. External power source becomes more uping more water into No1 reactor in line with this plan continination line from the fire extingushing line to the feed water and 3 may have lost air tightness. Liled to start in June. e (H2NNH2), has been injected into the SFP (5/9-). In the support the SFP is necessary. adding on Apr 17.	e the buildings of all Ur reliable after connection	it 1, 2, 3, started					

Government Nuclear Emergency Response Headquarters: News Release (-5/13 17:00), Press conference NISA: News Release (-5/13 12:00), Press conference

MEXT: Ministry of Education, Culture, Sports, Science and Technology

INES: International Nuclear Event Scale

NISA: Nuclear and Industrial Safety Agency TEPCO: Tokyo Electric Power Company, Inc. NSC: Nuclear Safety Commission of Japan *2 Correction: Rating was raised from 5 to 7 for the accident of Unit 1 through 3

*3 It is presumed that some of the spent fuel may have been damaged based on radioactive substance detected from the water sample taken from the pool of Unit 4.

Low High

Severe (Need immediate action)

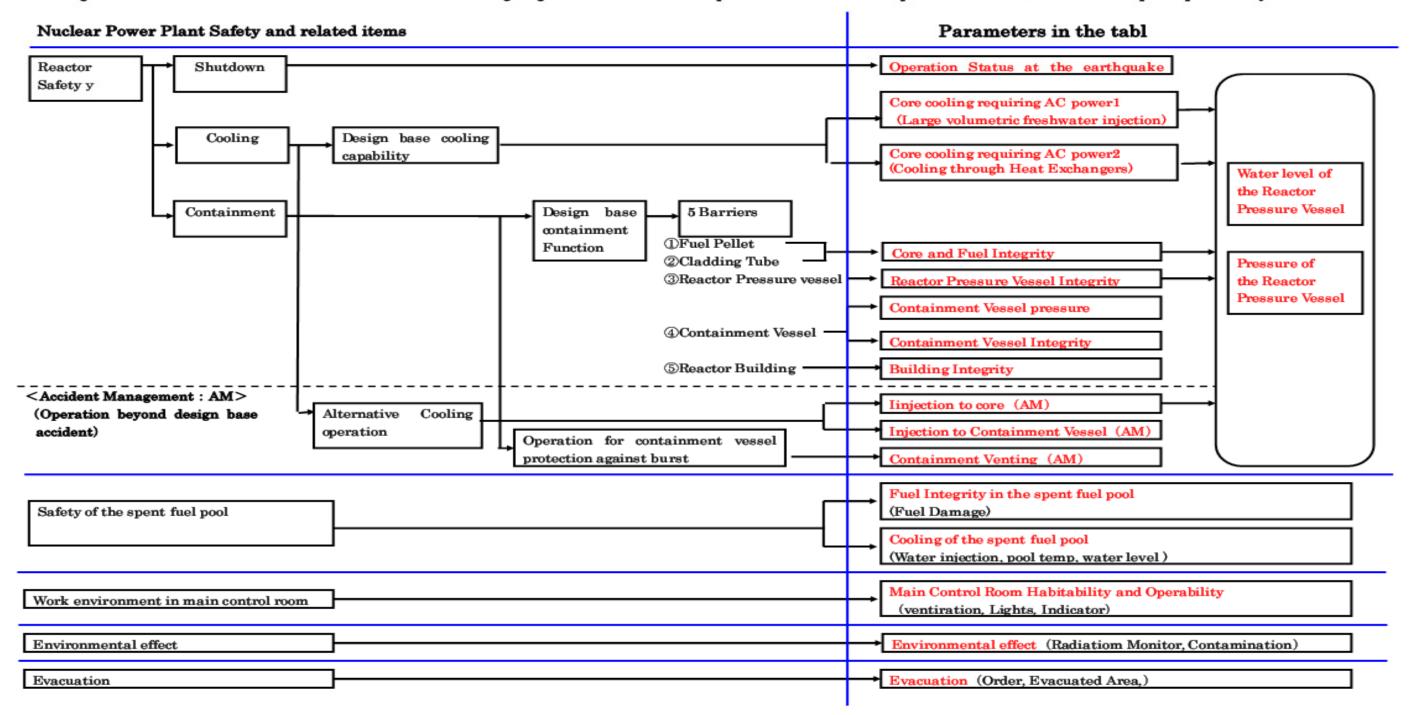
Power Station	Fukushima Dai-ni Nuclear Power Station				
Unit	1	2	3	4	
Electric / Thermal Power output (MW)	1100 / 3293				
Type of Reactor	BWR-5	BWR-5	BWR-5	BWR-5	
Operation Status at the earthquake occurred	In Service → Automatic Shutdown				
Status	All the units are in cold shutdown.				
INES (estimated by NISA)	Level 3	Level 3	_	Level 3	
Remarks	Unit-1, 2, 3 & 4, which were in full operation when the earthquake occurred, all shutdown automatically. External power supply was available after the quake. While injecting water into the reactor pressure vessel using make-up water system, TEPCO recovered the core cooling function and made the unit into cold shutdown state one by one. No parameter has shown abnormality after the earthquake occurred off an shore of Miyagi prefecture at 23:32, Apr. 7th. Latest Monitor Indication: 1.7 \(\omega\$ SV/h at 09:00, May 15th at NPS border Evacuation Area: 3km from NPS(3/12 7:45), 10km from NPS(3/12 17:39), 8km from NPS(4/21)				

Power Station	Onagawa Nuclear Power Station			
Unit	1	2	3	
Operation Status at the earthquake occurred	In Service -> Automatic Shutdown			
Status	All the units are in cold shutdown.			
Remarks	3 out of 4 external power lines in service with another line under construction broke down after an earthquake occurred off the shore of Miyagi prefecture at 23:32, Apr. 7th. All 5 external power lines have become available by Apr. 10th. Monitoring posts' readings have shown no abnormality. All SFP cooling systems had been restored after shutting down due to the earthquake.			

Power Station	Tokai Dai-ni
Operation Status at the earthquake occurred	In Service → Automatic Shutdown
Status	In cold shutdown.
Remarks	No abnormality has been found after an earthquake occurred off the shore of Miyagi prefecture at 23:32, Apr. 7th.

Parameters in the Table

JAIF picks up these parameters to evaluate safety condition of the nuclear plants during this accident from the view point of the principles of nuclear power plant safety, which are "Shutdown", "Cooling" and "Containment". Then we create the chart. The following diagram is to show the correspondence relation of these parameters in the table to nuclear power plant safety.



as of 17:00, May 13rd

1. Latest Major event and response

May 10th

13:09-14:45 Operation of injecting water to the Unit 3 SFP was conducted

Brief home visit of evacuees has been started:

54 households, 92 people, have done on May 10th. More visits are planned for 50 households on May 12th and are being scheduled for 120 households. Visits of the rest are planned in the end of May.

12:30 Water flow into a pit for the Unit 3 water intake power cables was found. Sampling of the water was conducted.

18:45 Stop of the water flow was confirmed after blocking the flow pass by injecting concrete.

May 12th

05:00 Instrumental reading of the water gage of the reactor No1 went off the scale on the lower side after adjusting the gage.

l) Fukushima Dai-ichi NPS	Unit 1	Unit 2	Unit 3	Unit 4	Unit-5 and 6
lajor Incidents and Actions	11th 15:42 Report IAW Article 10* (Loss of power)	11th 15:42 Report IAW Article 10* (Loss of power)	11th 15:42 Report IAW Article 10* (Loss of power)	14th 04:08 Water temperature in Spent Fuel Storage Pool increased at 84°C	19th 05:00 Cooling SFP with RHR-pump started at Unit 5
Measures Concerning Juclear Emergency Preparedness	, , , , , , , , , , , , , , , , , , , ,	11th 16:36 Event falling under Article 15* occurred (Incapability of water injection by core cooling function)	12th 20:41 Start venting	15th 09:38 Fire occurred on 3rd floor (extinguished spontaneously)	19th 22:14 Cooling SFP with RHR-pump started at Unit 6
	12th 00:49 Event falling under Article 15* occurred (Abnormal rise of CV pressure)	13th 11:00 Start venting	13th 05:10 Event falling under Article 15* occurred (Loss of reactor cooling functions)	16th 05:45 Fire occurred (extinguished spontaneously)	20th 14:30 Cold shutdown achieved at Unit 5. 20th 19:27 Cold shutdown achieved at Unit 6.
	12th 14:30 Start venting	14th 13:25 Event falling under Article 15* occurred (Loss of reactor cooling functions)	13th 08:41 Start venting	Since 20th, operation of spraying water to the spent fuel pool continues.	22nd 19:41 All power source was switched to external AC power at Unit 5 and 6.
	12th 15:36 Hydrogen explosion	14th 16:34 Seawater injection to RPV	13th 13:12 Seawater injection to RPV	29th 11:50 lights in the main control room becomes	
	12th 20:20 Seawater injection to RPV	14th 22:50 Report IAW Article 15* (Abnormal rise of CV pressure)	14th 05:20 Start venting	available	Apr. 1st 13:40 Start transferring pooled water in the Unit 6 radioactive waste process facility to
	22nd 11:20 RPV temperature increased	15th 00:02 Start venting	14th 07:44 Event falling under Article 15* occurred (Abnormal rise of CV pressure)	Apr. 13 13:50 Installation of silt fences in front of the Unit 3 and 4 seawater screen completed	the Unit 5 condenser.
	22nd 02:33 Seawater injection through feed water line started in addition to fire extinguish line	15th 06:10 Sound of explosion, Suppression Pool damage suspected	14th 11:01 Hydrogen explosion	May 5 12:19 Operation of spraying water to the spent fuel pool with concrete pump truck conducted.	May1 14:00 The operation of transferring water accumulated in Turbine bldg of unit-6 to the makeshift tank started.
	24th 11:30 lights in the main control room becomes available	15th 08:25 White smoke reeked	15th 10:22 Radiation dose 400mSv/h	May 6 12:38 Operation of spraying water to the spent fuel pool with concrete pump truck conducted.	May2 10:00 The operation of transferring water accumulated in Turbine bldg of unit-6 to the makeshift tank conducted.
	25th 15:37 Freshwater injection to the reactor started.	20th 15:05 operation of spraying water to the spent fuel pool started.	16th 08:34, 10:00 White smoke reeked	May 7 14:05 Operation of spraying water to the spent fuel pool with concrete pump truck conducted.	May 2 11:03 The Residual heat removal pump temporally stopped while start up transformer testing
	27th 08:30 Continuing to transfer the water in the basement of the turbine building	26th 10:10 Freshwater injection to the reactor started.	Since 17th, operation of spraying water to the spent fuel pool continues.	May 9 16:05 Operation of spraying water to the spent fuel pool with concrete pump truck conducted.	May3 14:00 The operation of transferring water accumulated in Turbine bldg of unit-6 to the makeshift tank conducted.
	31st 09:20-11:25 Work to remove the water in the trench	26th 16:46 lights in the main control room becomes available	21st 15:55 Slightly gray smoke erupted (18:02 settled)	May 11 16:07 Operation of spraying water to the spent fuel pool with concrete pump truck conducted.	May7 10:00 The operation of transferring water accumulated in Turbine bldg of unit-6 to the makeshift tank conducted.
; - - -	31st 12:00 Start to transfer the water in the CST to the surge tank (- 15:27, Apr. 2)	29th 16:45 Start to transfer the water in the CST to the surge tank	22nd 22:46 lights in the main control room becomes available		May9 14:00 The operation of transferring water accumulated in Turbine bldg of unit-6 to the makeshift tank conducted.
	31st 13:03 Start water injection to SFP	Apr. 2nd 16:25 Start injecting concrete to stop water leakage from the pit near the intake	25th 18:02 Freshwater injection to the reactor started.		May10 10:00 The operation of transferring water accumulated in Turbine bldg of unit-6 to the makeshift tank conducted.
	Apr. 3rd 12:18 Switch power supply for water injection pumps to the RPV from power supply vehicles to originally equipped power source	2nd 17:10 Start transferring water in the condencer to the CST	28th 17:40 Start to transfer the water in the CST to the surge tank		May10 11:00 The operation of transferring wate accumulated in reactor bldg of unit-6 to the waste processing facility conducted.
	Apr. 7th 01:31 Injection of Nitrogen gas started after opening all valves through the line.	Apr. 3rd 12:18 Switch power supply for water injection pumps to the RPV from power supply vehicles to originally equipped power source	Apr. 3rd 12:18 Switch power supply for water injection pumps to the RPV from power supply vehicles to originally equipped power source		May11 10:00 The operation of transferring water accumulated in Turbine bldg of unit-6 to the makeshift tank conducted.
	Apr. 10th 09:30 Transfer of water from the main condenser to the CST completed.	Apr. 5th 15:07 Regarding leakage from the pit that is closed to discharge outlet of unit-2, hardening agent was injected to hole dug surrounding the pit. (Apr. 6 05:38 It was confirmed that water flow stopped	Apr. 13 13:50 Installation of silt fences in front of the Unit 3 and 4 seawater screen completed		May11 11:00 The operation of transferring wat accumulated in reactor bldg of unit-6 to the waste processing facility conducted.
	Apr. 14 12:20 Installation of silt fences in front of the Unit 1and 2 seawater screen and intake completed	Apr. 9th 13:10 Transfer of water from the main condenser to the CST completed.	Apr 17 11:30 Start investigation of the inside of R/B using a remote-controlled robot.		May12 10:00 The operation of transferring water accumulated in Turbine bldg of unit-6 to the makeshift tank conducted.
	Apr 17 16:00 Start investigation of the inside of R/B using a remote-controlled robot.	Apr. 13th 17:04 Transfer of highly radioactively contaminated wafter accumulated in the trench outside the turbine building to the condenser completed	May 8 12:10 Water injected the SFP by temporally installed motor driven pump conducted.		May12 10:30 The operation of transferring wat accumulated in reactor bldg of unit-6 to the waste processing facility conducted.
	Apr. 29 11:36 The inside of the building was inspected. It was confirmed that there is no water significant leakage from the CV.	Apr. 14 12:20 Installation of silt fences in front of the Unit 1and 2 seawater screen and intake completed	May 9 12:14 Water injected the SFP by originally installed clean up system conducted.		May13 10:00 The operation of transferring wat accumulated in Turbine bldg of unit-6 to the makeshift tank conducted.
	May 2 12:58 Water feeding was temporally switched from to the reactor injection pump to the fire pump to install alarm device to the reactor injection pump.	Apr. 15th 14:15 Installation of steel plate in front of Unit 2 seawater screen completed			May 13 11:00 Water accumulated in the room for high pressure injection system room discharged to other space.
	May 5 11:32-16:36 Ventilators to clean the highly radioactive air inside the reactor building were installed and started.	Apr 18 13:42 Start investigation of the inside of R/B using a remote-controlled robot.			
	May 11 08:58 N2 injection to the CV temporally stopped while the work for restoring one of external power sources being conducted. It resumed later.	Apr. 19 10:08 Start transferring highly radioactive water accumulated in the turbine building and the concrete tunnel to the waste processing facility			
	May 12 05:00 Instrumental reading of the water gage of the reactor No1 went off the scale on the lower side after adjusting the gage.	Apr. 30 14:05 Start transferring highly radioactive water accumulated in the vertical part of the concrete tunnel outside the turbine BLDG to the waste processing facility			
	1			1	1

		May 1 13:35 The work to block the vertical concrete tunnel outside the turbine bldg started.			
		May 2 12:58 Water feeding was temporally switched from to the reactor injection pump to the fire pump to install alarm device to the reactor injection pump.			
		May 6 09:36 Water injected the SFP conducted			
		May 7 09:22 Operation of discharging water accumulated in the concrete tunnel outside turbine bldgtto he waste processing facility temporally stopped while piping work for feeding water into the reactor being conducted.			
		May 10 13:09 Water injected the SFP conducted			
		May 12 15:20 Operation of discharging water accumulated in the concrete tunnel outside turbine bldg to the waste processing facility temporally restarted,			
		<u> </u>	-		
Major Data *1	Reactor Water level (May 13 11:00) (A) (lower than the scale), (B) -1700mm	Reactor Water level (May <u>13 11:00</u>) (A) <u>-1500</u> mm, (B) <u>-2100</u> mm	Reactor Water level (May <u>13 11:00</u>) (A) <u>-1800</u> mm, (B) <u>-2250</u> mm	SFP water temperature measured with a concrete	Water temperature of SFP
	Reactor pressure (May <u>13 11:00</u>) (A) <u>0.478</u> MPaG, (B) <u>1298</u> MPaG*2	Reactor pressure (May <u>13 11:00</u>) (A) <u>-0.018</u> MPaG*2, (B) <u>-0.016</u> MPaG*2	Reactor pressure (May <u>13 11:00</u>) (A) <u>-0.089</u> MPaG*2, (B) <u>-0.091</u> MPaG*2		Unit 5 42.8°C (May 13 12:00) Unit 6 37.5°C (May 13 12:00)
	CV pressure (May <u>13 11:00</u>) <u>0.1204</u> MPaabs	CV pressure (May <u>13 11:00</u>) <u>0.055</u> MPaabs	CV pressure (May <u>13 11:00</u>) <u>0.099</u> MPaabs		
	RPV temperature (May <u>13 11:00</u>) <u>114.2</u> °C*2 at feed water line nozzle	RPV temperature (May 13 11:00) 114.6°C at feed water line nozzle Water temperature in SFP (May 13 11:00) 48.0°C	RPV temperature (May <u>13 11:00</u>) <u>155.4</u> °C*2 at feed water line nozzle		
	Thermography (Apr. 26 07:30) CV: 25°C, SFP: 23°C	Thermography (Apr. 26 07:30) Top of R/B: 24°C	Thermography (Apr. 26 07:30) CV: 26°C, SFP: 56°C		

(2) Fukushima Dai-ni NPPs

All units are cold shutdown (Unit-1, 2, 4 have been recovered from a event falling under Article 15*)

3. State of Emergency Declaration

11th 19:03 State of nuclear emergency was declared (Fukushima Dai-ni NPS)

12th 07:45 State of nuclear emergency was declared (Fukushima Dai-ichi NPS)

4. Evacuation Order

11th 21:23 PM direction: for the residents within 3km radius from Fukushima I to evacuate, within 10km radius from Fukushima I to stay in-house

12th 05:44 PM direction: for the residents within 10km radius from Fukushima I to evacuate

12th 17:39 PM direction: for the residents within 10km radius from Fukushima II to evacuate

12th 18:25 PM direction: for the residents within 20km radius from Fukushima I to evacuate

15th 11:06 PM direction: for the residents within 20-30km radius from Fukushima I to stay in-house

25th Governmental advise: for the residents within 20-30 km radius from Fukushima I to voluntarily evacuate

Abbreviations:

SFP: Spent Fuel Storage Pool

EDG: Emergency Diesel Generator

RPV: Reactor Pressure Vessel

R/B: Reactor Building

RHR: Residual Heat Removal system CST: Condensate water Storage Tank

T/B: Turbine Building

*1 Trend data of primary parameters are available at Japan Nuclear

Technology Institute's Home Page;

"http://www.gengikyo.jp/english/shokai/special_4.html".

*2 Data trend is continuously monitored.



