Fukushima Daiichi Nuclear Power Station Plant Parameters

[Note]

Some indicators might not be functioning properly beyond the normal condition for usage affected by the earthquake and subsequent events. We comprehensively evaluate situation in plants using all the available information from indicators and also focusing on trends, taking uncertainty of indicators into consideration.

As of 06:00 on June 6

Unit	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Status of water injection to the reactor	Fresh water feeding Feed water system 5.1m ³ /h (as of 5:00 , 6/6)	Fresh water feeding Feed water system 5.0m ³ /h (as of 5:00 , 6/6)	Fresh water feeding Feed water system 11.3~11.5m ³ /h (as of 5:00 , 6/6)		(Heat removal of the reactor is functioning, Water injection is unnecessary)	
Water level in the reactor	Fuel range A: Downscale Fuel range B:-1550mm (as of 5:00 , 6/6)	Fuel range A:-1500 mm Fuel range B:-2100 mm (as of 5:00 , 6/6)	Fuel range A:-1850 mm Fuel range B:-2150 mm (as of 5:00 , 6/6)		Stoppage range 1870mm (as of 6:00 , 6/6)	Stoppage range 2386mm (as of 6:00 , 6/6)
Pressure in the reactor	System A:0.027 MPa g System B:-MPa g (as of 5:00 , 6/6)	System A:-0.016 MPa g (A)%3 System B:-0.011 MPa g (D)%3 (as of 5:00 , 6/6)	System A:-0.136 MPa g (A); System B:-0.113 MPa g (C); (as of 5:00 , 6/6)		0.008 MPa g (as of 6:00 , 6/6)	0.023 MPa g (as of 6:00 , 6/6)
Water temperature of the reactor	(Since there is no water inflow in the system it is impossible to collect the data)				41.0 °C (as of 6:00 , 6/6)	28.1 °C (as of 6:00 , 6/6)
Temperature around the reactor vessel	Temperature in feed-water nozzle:115.3 °C	Temperature in feed-water nozzle:109.5 °C Temperature at reactor vessel bottom:107.8 °C	Temperature in feed-water nozzle:140.7 °C	%2 (Monitoring is unnecessary since all fuel are	#2 (monitoring through water temperature of the reactor)	
Pressure in D/W · S/C	D/W:0.1290 MPa abs* S/C:0.110 MPa abs (as of 5:00 , 6/6)	D/W:0.025 MPa abs %3 S/C: Downscale %1 (as of 5:00 , 6/6)	D/W:0.0992 MPa abs S/C:0.1803 MPa abs (as of 5:00 , 6/6)	takeoff)	%2 (Monitoring is unnecessary since heat removal of reactor is functioning.)	
D/W Atmosphere temperature	RPV bellow seal:99.6 °C HVH return:99.8 °C (as of 5:00 , 6/6)	RPV bellow seal:75°C	RPV bellow seal:201.7 °C & %3 HVH return:154.6 °C (as of 5:00 , 6/6)			
	D/W(A):8.98E-01Sv/h %1 (B):3.55E-01Sv/h %1 S/C(A):8.53E-01Sv/h %3 (B):8.73E-01Sv/h %3 (as of 5:00 , 6/6)	D/W(A):1.55E+01Sv/h (B):1.72E+01Sv/h S/C(A):3.03E-01Sv/h %3 (B):2.94E+01Sv/h %3 (as of 5:00 , 6/6)	D/W(A):6.18E+00Sv/h & %3 B):3.38E+00Sv/h S/C(A):3.61E-01Sv/h & %3 B):3.34E-01Sv/h & %3 (as of 5:00 , 6/6)			
Temperature in S/C	System A:51.1 °C System B:50.9 °C (as of 5:00 , 6/6)	System A:61.6 °C System B:61.6 °C (as of 5:00 , 6/6)	System A:46.4 °C System B:46.5 °C (as of 5:00 , 6/6)			
Designed usable D/W pressure	0.384MPa g (0.485MPa abs)	0.384MPa g (0.485MPa abs)	0.384MPa g (0.485MPa abs)			
Designed usable D/W maximum pressure	0.427MPa g (0.528MPa abs)	0.427MPa g (0.528MPa abs)	0.427MPa g (0.528MPa abs)	_	-	_
Temperature in the spent fuel pool	*1	32°C (as of 5:00 , 6/6)	62 °C (as of 5/8) : %4	84 °C (as of 5/7) : %4	40.8 °C (as of 6:00 , 6/6)	38.0 ℃ (as of 6:00 , 6/6)
FPC skimmer surge tank level	1350mm (as of 5:00 , 6/6)	2800mm (as of 5:00 , 6/6)	※ 1	6500mm (as of 5:00 , 6/6)	*	2
Power source	Receiving offsite	ceiving offsite power (P/C2C) Receiving offsite power (P/C4D))	Receiving offsite power	
Others	 Regarding reactor water level fuel range A of Unit 1, inspection of the instrument was completed at 17:00, May 11 Regarding pressure in Unit 1, due to installment of the temporary instrument, its reading instead of those of System A and B will be described in the column of System A from 11:00, June 4. *Data of Pressure in D/W of Unit 1 on 11/29 was corrected because it was incorrect. 				5u : SHC mode (from 20:52 ,6/5)	6u: SHC mode (from 10:03 ,6/5)
		– atmospheric pressure (normal atmospheric pressure) tmospheric pressure (normal atmospheric pressure).101	3 MPa)	ment failure overed for colleting dat uously monitoring the		

*3 : continuously monitoring the status

*4 measured at SFP sampling

Fukushima Daiichi Nuclear Power Station Supplemental explanation for the plant parameters

■Supplemental explanation for each parameter

ltem	Recording manner	Measurement manner	Ch number or number of systems	
Status of water injection to the reactor	Water inflow	Temporary	System 1 / 1	
Water level in the reactors	Data measured by the water gauge, which monitor the fuel range	Main indicator	System A 1∕1Ch System B 1∕1Ch	
Pressure in the reactor	Measure voltage value of pressure instrument by the main indicator panel and convert to the pressure. One representing value is noted among multiple data on each System A, B.	Unit 1 Temporary Unit 2/3 Measures voltage value through the main indicator panel and converts them to the pressure	System A 1/2Ch System B 1/2Ch	
Temperature in the reactor	Since there is no water inflow at the points, where thermometers are set, no data is collected.	—	-	
	Data measured at feed-water nozzle and at reactor vessel bottom are noted among multiple data to view the whole picture.	Main recorder	Point of Feed-water nozzle 1/4Ch reactor vessel bottom 1/2Ch (Unit1) 1/1Ch (Unit2/3)	
Pressure in D/W • S/C	Data from main indicator. Measure voltage value by the main indicator panel converted to the pressure in case main indicator are not in function. (D/W : Dry Well、S/C : Suppression Chamber)	Unit1/2:Main indicator Unit 3:Main indicator panel (converted from voltage) :	Main indicator system 1 / 1 Main recorder regular use 1 / 1Ch wide range 1 / 1Ch	
D/W Atmosphere temperature	Data at upper point (RPV Bellows Air) and middle point (HVH return) are noted among multiple data to view the whole picture. (RPV : Reactor Pressure Vessel, HVH : Heating Ventilating Handling Unit)	Main recorder	RPV Bellows Air 1 / 5Ch D/W HVH return 1 / 5Ch	
CAMS radiation monitor	Data from the instrument reading of main indicator. (CAMS : Containment Atmospheric Monitoring System)	Main indicator	D/W System A 1 / 1 Ch System B 1 / 1 Ch S/C System A 1 / 1 Ch System B 1 / 1 Ch	
Temperature in S/C	Data from the instrument reading of main recorder. One representing value is noted among multiple data on each System A, B.	Main recorder	System A1/4Ch (Unit 1)、8Ch (Unit 2/3) System B1/4Ch (Unit 1)、8Ch (Unit 2/3)	
Temperature in the spent fuel pool	Data from the instrument reading of main recorder (Non-thermal mode : Urgent Heat load Mode、SHC mode : Shut down Cooling Mode)	Main recorder	1/2Ch (Unit 1)、1Ch (Unit 2~4)	
FPC skimmer surge tank level	Data from the instrument reading of main indicator (FPC : Fuel Pool Cooling and Filtering System)	Main indicator	System 1 / 1	

■Supplemental explanation for notes

ltem	Contents	Status As of 06:00 on June 6		
Instrument failure	Instrument failure : down of instrument reading (over) scale/failure of instrument	 Unit 1 Spent fuel pool temperature, CAMS D/W radiation monitor Unit 2 Temperature at reactor vessel bottom, pressure in S/C, RPV Bellows Air temperature Unit 3 Spent fuel pool temperature, level of skimmer surge tanks Unit 4 Spent fuel pool temperature 		
	Unit4: Monitoring is not implemented since all fuel are takeoff. Unit5/6: Monitoring is not implemented since heat removal of reactor is functioning			
Continuously monitoring the status	Inaccurate Data defined from relation with other Parameters such as negative figure.	 Unit 1 feed-water nozzle temperature, CAMS S/C radiation monitor Unit 2 Reactor pressure, pressure in D/W, CAMS S/C radiation monitor Unit 3 Reactor pressure, RPV bellow air temperature, feed-water nozzle temperature, CAMS D/W · S/C radiation monitor 		