

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 07:00 on June 1

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 5.0m ³ /h (as of 5:00, 6/1)	Fresh water feeding Feed water system 4.9m ³ /h (as of 5:00, 6/1)	Fresh water feeding Feed water system 12.5m ³ /h (as of 5:00, 6/1)	※2 (Monitoring is unnecessary since all fuel are takeoff)	※2 (Heat removal of the reactor is functioning. Water injection is unnecessary)		
Water level in the reactor	Fuel range A: Downscale Fuel range B:-1750 mm (as of 5:00, 6/1)	Fuel range A:-1500 mm Fuel range B:-2100 mm (as of 5:00, 6/1)	Fuel range A:-1850 mm Fuel range B:-1950 mm (as of 5:00, 6/1)		Stoppage range 1732mm (as of 7:00, 6/1)	Stoppage range 2637mm (as of 7:00, 6/1)	
Pressure in the reactor	System A:0.578 MPa g System B:1.568 MPa g (as of 5:00, 6/1)	(A)※3 System A:-0.016 MPa g (B)※3 System B:-0.016 MPa g (as of 5:00, 6/1)	(A)※3 System A:-0.142 MPa g (D)※3 System B:-0.115 MPa g (as of 5:00, 6/1)		(A)※3 (C)※3	0.007 MPa g (as of 7:00, 6/1)	0.029 MPa g (as of 7:00, 6/1)
Water temperature of the reactor	(Since there is no water inflow in the system it is impossible to collect the data)						
Temperature around the reactor vessel	Temperature in feed-water nozzle:107.4℃ ※3 Temperature at reactor vessel bottom:93.2℃ (as of 5:00, 6/1)	Temperature in feed-water nozzle:110.2℃ Temperature at reactor vessel bottom:107.8℃ ※1 (as of 5:00, 6/1)	Temperature in feed-water nozzle:125.8℃ ※3 Temperature at reactor vessel bottom:137.4℃ (as of 5:00, 6/1)		※2 (Monitoring is unnecessary since all fuel are takeoff)	※2 (monitoring through water temperature of the reactor)	
Pressure in D/W · S/C	D/W:0.1274 MPa abs S/C:0.100 MPa abs (as of 5:00, 6/1)	D/W:0.030 MPa abs S/C: Downscale ※1 (as of 5:00, 6/1)	D/W:0.1015 MPa abs S/C:0.1838 MPa abs (as of 5:00, 6/1)				
D/W Atmosphere temperature	RPV bellow seal:93.5℃ HVH return:94.1℃ (as of 5:00, 6/1)	RPV bellow seal:160℃ ※1 HVH return:101℃ (as of 5:00, 6/1)	RPV bellow seal:206.2℃ ※3 HVH return:133.1℃ (as of 5:00, 6/1)			※2 (Monitoring is unnecessary since heat removal of reactor is functioning.)	
CAMS radiation monitor	D/W(A):6.94E-01Sv/h ※1 (B):1.85E+02Sv/h ※1 S/C(A):8.92E-01Sv/h ※3 (B):9.19E-01Sv/h ※3 (as of 5:00, 6/1)	D/W(A):1.62E+01Sv/h ※1 (B):1.81E+01Sv/h ※3 S/C(A):3.08E-01Sv/h ※3 (B):3.60E+01Sv/h ※3 (as of 5:00, 6/1)	D/W(A):6.90E+00Sv/h ※3 (B):3.70E+00Sv/h ※3 S/C(A):3.68E-01Sv/h ※3 (B):3.38E-01Sv/h ※3 (as of 5:00, 6/1)				
Temperature in S/C	System A:52.6℃ System B:52.5℃ (as of 5:00, 6/1)	System A:62.9℃ System B:63.1℃ (as of 5:00, 6/1)	System A:45.8℃ System B:45.8℃ (as of 5:00, 6/1)				
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	64℃ (as of 5:00, 6/1)	62℃ (as of 5/8) : ※4	84℃ (as of 5/7) : ※4	43.1℃ (as of 7:00, 6/1)	31.0℃ (as of 7:00, 6/1)	
FPC skimmer surge tank level	3700mm (as of 5:00, 6/3)	2100mm (as of 5:00, 6/1)	※1	6200mm (as of 5:00, 6/1)	※2		
Power source	Receiving 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 - Changing status of water injection to the reactor on Unit 2 of Feed water system from 6.0m ³ /h to 5.0m ³ /h. (at 20:30, May 31)			Temperature in the Common Spent Fuel Storage: 26℃ (as of 6:50, 5/31)	5u : SHC mode (from 21:25, 5/31)	6u: Non-thermal mode (from 9:54, 5/30)	

Pressure conversion Gauge pressure(MPa g) = Absolute pressure(MPa abs) - atmospheric pressure (normal atmospheric pressure0.1013 MPa)
Absolute pressure(MPa abs) = Gauge pressure(MPa g) + atmospheric pressure (normal atmospheric pressure0.1013 MPa)

※1 : Instrument failure
※2 : Not covered for collecting data
※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

Item	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 / 1 Ch System B 1 / 1 Ch
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.	Measures voltage value through the main indicator panel and converts them to the pressure	System A 1 / 2 Ch System B 1 / 2 Ch
Temperature in the reactor	Since there is no water inflow at the points, where thermometers are set, no data is collected.	—	—
Temperature around the reactor vessel	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 / 4 Ch reactor vessel bottom 1 / 2 Ch (Unit 1) 1 / 1 Ch (Unit 2/3)
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)	Unit 1/2: Main indicator Unit 3: Main indicator panel (converted from voltage) :	Main indicator system 1 / 1 Main recorder regular use 1 / 1 Ch wide range 1 / 1 Ch
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 / 5 Ch D/W HVH return 1 / 5 Ch
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 A 1 / 4 Ch (Unit 1) 、 8 Ch (Unit 2/3) System B 1 / 4 Ch (Unit 1) 、 8 Ch (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 / 2 Ch (Unit 1) 、 1 Ch (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

Item	Contents	Status As of 07:00 on June 1
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
Not covered for collecting data	Unit 4: Monitoring is not implemented since all fuel are takeoff. Unit 5/6: 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 Reactor pressure, feed-water nozzle temperature, CAMS S/C radiation monitor Unit 2 Reactor pressure, CAMS S/C radiation monitor Unit 3 Reactor pressure, RPV bellow air temperature, feed-water nozzle temperature, CAMS D/W · S/C radiation monitor