

The red words are revised due to the ' Incorrect data for pressure at Primary Containment Vessel of Unit1 ' which we announced on November 29.

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 October 20

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 3.6m ³ /h (as of 5:00, 10/20)	Fresh water feeding Feed water system 3.5m ³ /h, CS line 7.1m ³ /h (as of 5:00, 10/20)	Fresh water feeding Feed water system 2.1m ³ /h, CS line 8.0m ³ /h (as of 5:00, 10/20)		※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, 10/20) ※3	Fuel range A:-1800 mm Fuel range B:-2200 mm (as of 5:00, 10/20) ※3	Fuel range A:-2300 mm Fuel range B:-2350 mm (as of 5:00, 10/20) ※3		Stoppage range 1844mm (as of 6:00, 10/20)	Stoppage range 2049mm (as of 6:00, 10/20)
Pressure in the reactor	System A:0.009 MPa g System B:-MPa g (as of 5:00, 10/20)	System A:0.018 MPa g System B:-MPa g (as of 5:00, 10/20)	System A:-0.176 MPa g System B:-0.128 MPa g (as of 5:00, 10/20)	(A)※3 (C)※3	0.010 MPa g (as of 6:00, 10/20)	0.018 MPa g (as of 6:00, 10/20)
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:70.1 °C Temperature at reactor vessel bottom:72.2 °C (as of 5:00, 10/20)	Temperature in feed-water nozzle:74.7 °C Temperature at reactor vessel bottom:81.4 °C (as of 5:00, 10/20)	Temperature in feed-water nozzle:69.7 °C Temperature at reactor vessel bottom:72.2 °C (as of 5:00, 10/20)	※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:0.1198 MPa abs* S/C:0.100 MPa abs (as of 5:00, 10/20)	D/W:0.119 MPa abs S/C: Downscale (as of 5:00, 10/20) ※1	D/W:0.1015 MPa abs S/C:0.1880 MPa abs (as of 5:00, 10/20)			
D/W Atmosphere temperature	RPV bellow seal:71.2 °C HVH return:73.5 °C (as of 5:00, 10/20)	RPV bellow seal:72°C HVH return:88°C (as of 5:00, 10/20) ※3	RPV bellow seal:86.5 °C HVH return:68.9 °C (as of 5:00, 10/20) ※3			
CAMS radiation monitor	D/W(A):0.00E+00Sv/h (B):3.70E+01Sv/h S/C(A):6.67E-01Sv/h (B):6.74E-01Sv/h (as of 5:00, 10/20) ※1	D/W(A):8.24E+00Sv/h (B):3.20E+00Sv/h S/C(A):1.02E-01Sv/h (B):4.34E+00Sv/h (as of 5:00, 10/20) ※1	D/W(A):3.32E+00Sv/h (B):2.27E+00Sv/h S/C(A):2.84E-01Sv/h (B):2.68E-01Sv/h (as of 5:00, 10/20) ※3		※2 (Monitoring is unnecessary since heat removal of reactor is functioning.)	
Temperature in S/C	System A:43.4 °C System B:43.2 °C (as of 5:00, 10/20)	System A:55.1 °C System B:55.0 °C (as of 5:00, 10/20)	System A:42.7 °C System B:42.9 °C (as of 5:00, 10/20)			
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	23.5 °C (as of 5:00, 10/20)	26.0°C (as of 5:00, 10/20)	23.9 °C (as of 5:00, 10/20)	31°C (as of 5:00, 10/20)	25.5 °C (as of 6:00, 10/20)	25.0 °C (as of 6:00, 10/20)
FPC skimmer surge tank level	2670mm (as of 5:00, 10/20)	3550mm (as of 5:00, 10/20)	5000mm (as of 5:00, 10/20)	4150mm (as of 5:00, 10/20)	※2	
Power source	Receiving offsite power (P/C2C)		Receiving offsite power (P/C4D)		Receiving offsite power	
Others	・ Unit 6 Oct. 19 14:30 pm - 15:02 pm Residual Heat Removal System (SHC mode) was stopped for the maintenance of Residual Heat Removal System and its seawater pumps. * Data of Pressure in D/W of Unit 1 on 11/29 was corrected because it was incorrect.			Temperature in the Common Spent Fuel Storage: 28°C (as of 9:50, 10/19)	5u: SHC mode (from 11:34, 9/30)	6u: SHC mode (from 15:02, 10/19)

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

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 (CS line : Core Spray system)	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.	Unit 1/2 Temporary Unit 3 Measures voltage value through the main indicator panel and converts them to the pressure	Temporary indicator: 1 / 1 system Main: 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 (1U, 3U : RPV Bottom Head, 2U : RPV Wall Above Bottom Head) 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 instrument. Measure voltage value by the main instrument panel converted to the pressure in case main instruments are not in function. As to the D/W pressure of Unit 2, the reading of the temporary indicator is described. (D/W : Dry Well, S/C : Suppression Chamber)	(D/W) Unit 1: Main recorder Unit 2: Temporary Unit 3: Main instrument panel (converted from voltage) (S/C) Unit 1/2: Main indicator Unit 3: Main instrument panel (converted from voltage)	(D/W) Main recorder wide range 1 / 1 Ch (Unit 1) Temporary indicator: 1 / 1 system (Unit 2) Main instrument panel 1 / 4 Ch (Unit 3) (S/C) Main indicator 1 / 1 system (Unit 1/2) Main instrument panel 1 / 2 Ch (Unit 3)
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)	Unit 1: Main instrument panel (converted from voltage) Unit 2/3: 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) , 8Ch (Unit 2/3) System B 1 / 4 Ch (Unit 1) , 8Ch (Unit 2/3)
Temperature in the spent fuel pool	Data from the instrument reading or from the measurement reading of samples of main indicator and temporary insuturment (Non-thermal mode : Urgent Heat load Mode, SHC mode : Shut down Cooling Mode)	Unit 2: Main recorder Unit 1/3/4: Temporary indicator	Main: 1 / 1 Ch (Unit 2) Temporary indicator: 1 / 1 system (Unit 1/3/4)
FPC skimmer surge tank level	• Unit 2, 4 are the FPC skimmer surge tank level measured main indicator. • Unit 1, 3 are the FPC skimmer surge tank level estimated from temporary pressure gages. (reference value) (FPC : Fuel Pool Cooling system)	Unit 2/4: Main indicator Unit 1/3: Temporary instrument (Pressure gages)	Main indicator: 1 / 1 system (Unit 2/4) Temporary instrument: 1 / 1 system (Unit 1/3)

■ Supplemental explanation for notes

Item	Contents	Status As of 06:00 on October 20
Instrument failure	Instrument failure : down of instrument reading (over) scale / failure of instrument	Unit 1 CAMS D/W radiation monitor Unit 2 Pressure in S/C, CAMS D/W(B) radiation monitor, CAMS S/C(B) radiation monitor Unit 3 —
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 water level(B) Unit 2 Reactor water level, RPV bellow air temperature, Unit 3 Reactor water level, reactor pressure, RPV bellow air temperature, CAMS D/W(A) radiation monitor