

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

[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.

### Fukushima Daiichi Nuclear Power Station Plant Parameters

As of 12:00 pm on May 21

Unit	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	
Status of water injection to the reactor	Fresh water injection through Feed water system 6.0 m <sup>3</sup> /h (as of 11:00 am, May 21)	Fresh water injection through Fire protection system 7.0 m <sup>3</sup> /h (as of 11:00 am, May 21)	Fresh water injection through Fire protection system 6.0 m <sup>3</sup> /h (11:00 am, May 21) Feed water system 12.0 m <sup>3</sup> /h (11:00 am, May 21)	※2 (Monitoring is unnecessary since all fuel are removed.)	※2 (Heat removal of the reactor is functioning. Water injection is unnecessary)		
Water level in the reactor	Fuel range A:Below measurement range Fuel range B:-1550 mm (as of 11:00 am, May 21)	Fuel range A:-1500 mm Fuel range B:-2100 mm (as of 11:00 am, May 21)	Fuel range A:-1800mm Fuel range B:-2300mm (as of 11:00 am, May 21)		Stoppage range 1972mm (as of 12:00 pm, May 21)	Stoppage range 2181mm (as of 12:00 pm, May 21)	
Pressure in the reactor	Syatem A:0.528 MPa g (A) System B:1.423 MPa g (B)※3 (as of 11:00 am, May 21)	Syatem A:0.018 MPa g (A)※3 System B:-0.016 MPa g (D)※3 (as of 11:00 am, May 21)	Syatem A:-1.000 MPa g (A)※3 System B:-0.089 MPa g (C)※3 (as of 11:00 am, May 21)		0.007 MPa g (as of 12:00 pm, May 21)	0.018 MPa g (as of 12:00 pm, May 21)	
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:112.9 ※3 Temperature at reactor vessel bottom:95.6 (as of 11:00 am, May 21)	Temperature in feed-water nozzle:112.3 ※1 Temperature at reactor vessel bottom:108.7 (as of 11:00 am, May 21)	Temperature in feed-water nozzle:111.2 ※3 Temperature at reactor vessel bottom:103.5 (as of 11:00 am, May 21)		※2 (monitoring through water temperature of the reactor)		
Pressure in D/W · S/C	<u>D/W:0.1298 MPa abs*</u> S/C:0.100 MPa abs (as of 11:00 am, May 21)	D/W:0.040 MPa abs S/C:Below measurement range (as of 11:00 am, May 21)	D/W:0.1010 MPa abs S/C:0.1946 MPa abs (as of 11:00 am, May 21)		※2 (Monitoring is unnecessary since heat removal of reactor is functioning.)		
D/W Atmosphere temperature	RPV bellow seal:96.8 HVH return:94.5 (as of 11:00 am, May 21)	RPV bellow seal:Overscale ※1 HVH return:112 (as of 11:00 am, May 21)	RPV bellow seal:101.3 ※3 HVH return:104.3 (as of 11:00 am, May 21)				
CAMS radiation monitor	D/W(A):2.35E-01Sv/h ※1 (B):3.36E+01Sv/h ※1 S/C(A):1.01E+00Sv/h ※3 (B):1.02E+00Sv/h ※3 (as of 11:00 am, May 21)	D/W(A):1.81E+01Sv/h (B):2.01E+01Sv/h ※3 S/C(A):3.21E-01Sv/h ※3 (B):5.04E+01Sv/h ※3 (as of 11:00 am, May 21)	D/W(A):8.17E+00Sv/h (B):5.01E+00Sv/h ※3 S/C(A):4.08E-01Sv/h ※3 (B):3.73E-01Sv/h ※3 (as of 11:00 am, May 21)				
Temperature in S/C	System A:53.6 System B:53.4 (as of 11:00 am, May 21)	System A:64.4 System B:64.6 (as of 11:00 am, May 21)	System A:42.0 System B:42.0 (as of 11:00 am, May 21)				
Designed usable D/W pressure	0.384MPa <sub>g</sub> (0.485MPa abs)	0.384MPa <sub>g</sub> (0.485MPa abs)	0.384MPa <sub>g</sub> (0.485MPa abs)				
Designed usable D/W maximum pressure	0.427MPa <sub>g</sub> (0.528MPa abs)	0.427MPa <sub>g</sub> (0.528MPa abs)	0.427MPa <sub>g</sub> (0.528MPa abs)				
Temperature in the spent fuel pool	※1	49 (as of 11:00 am, May 21)	62 °C (as of May 8) : ※4	84 °C (as of May 7) : ※4	43.8 (as of 12:00 pm, May 21)	38.5 (as of 12:00 pm, May 21)	
FPC skimmer surge tank level	1750mm (as of 11:00 am, May 21)	2950mm (as of 11:00 am, May 21)	※1	4950mm (as of 11:00 am, May 21)	※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 5:00 pm, May 11 <u>*Data of Pressure in D/W of Unit 1 on 11/29 was corrected because it was incorrect.</u>			Temperature in the Common Spent Fuel Pool: 29°C (as of 7:10 am, May 21)	5u: Non-thermal mode (from 9:46 am, May 21)	6u: SHC mode (from 10:30 am, 5/20)	

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	Volume and methods of water inflow	temporary indicator	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 indicator	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)	Unit1/2: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 indicator	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 indicator	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	As of 12:00 pm on May 21
Instrument failure	Instrument failure : below/over measurement range of instrument / 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	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 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 S/C radiation monitor