

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 July 19

| 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 4.0m ³ /h (as of 5:00, 7/19) | Fresh water feeding Feed water system 4.1m ³ /h (as of 5:00, 7/19) | Fresh water feeding Feed water system 9.1m ³ /h (as of 5:00, 7/19) | ※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:-1700 mm (as of 5:00, 7/19) ※3 | Fuel range A:-1850 mm Fuel range B:-2150 mm (as of 5:00, 7/19) ※3 | Fuel range A:-2050 mm Fuel range B:-2300 mm (as of 5:00, 7/19) ※3 | | Stoppage range 1940mm (as of 6:00, 7/19) | Stoppage range 2123mm (as of 6:00, 7/19) | |
| Pressure in the reactor | System A:0.034 MPa g System B:-MPa g (as of 5:00, 7/19) | System A:0.025 MPa g System B:-MPa g (as of 5:00, 7/19) | System A:-0.166 MPa g System B:-0.106 MPa g (as of 5:00, 7/19) (A)※3 (C)※3 | | 0.010 MPa g (as of 6:00, 7/19) | 0.023 MPa g (as of 6:00, 7/19) | |
| 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:112.3 °C Temperature at reactor vessel bottom:100.1 °C (as of 5:00, 7/19) | Temperature in feed-water nozzle:110.6 °C Temperature at reactor vessel bottom:125.5 °C (as of 5:00, 7/19) | Temperature in feed-water nozzle:135.0 °C Temperature at reactor vessel bottom:112.0 °C (as of 5:00, 7/19) | | ※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:0.1391 MPa abs* S/C:0.120 MPa abs (as of 5:00, 7/19) | D/W:0.127 MPa abs S/C: Downscale (as of 5:00, 7/19) ※1 | D/W:0.1016 MPa abs S/C:0.1841 MPa abs (as of 5:00, 7/19) | | | | |
| D/W Atmosphere temperature | RPV bellow seal:99.9 °C HVH return:101.1 °C (as of 5:00, 7/19) | RPV bellow seal:126 °C HVH return:125 °C (as of 5:00, 7/19) ※3 | RPV bellow seal:142.6 °C HVH return:146.5 °C (as of 5:00, 7/19) ※3 | | | ※2 (Monitoring is unnecessary since heat removal of reactor is functioning.) | |
| CAMS radiation monitor | D/W(A):0.00E+00Sv/h (B):4.59E+01Sv/h S/C(A):7.24E-01Sv/h (B):7.52E-01Sv/h (as of 5:00, 7/19) ※1 ※1 | D/W(A):1.26E+01Sv/h (B):1.43E+01Sv/h S/C(A):1.67E-01Sv/h (B):8.22E+00Sv/h (as of 5:00, 7/19) ※1 | D/W(A):4.20E+00Sv/h (B):2.71E+00Sv/h S/C(A):3.17E-01Sv/h (B):2.95E-01Sv/h (as of 5:00, 7/19) ※3 | | | | |
| Temperature in S/C | System A:48.1 °C System B:47.9 °C (as of 5:00, 7/19) | System A:51.1 °C System B:51.0 °C (as of 5:00, 7/19) | System A:46.4 °C System B:46.5 °C (as of 5:00, 7/19) | | | | |
| 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 | 36.0 °C (as of 5:00, 7/19) | 32.6 °C (as of 5:00, 7/19) | 89~91 °C (as of 16:00, 7/18) | 30.5 °C (as of 6:00, 7/19) | 44.5 °C (as of 6:00, 7/19) | |
| FPC skimmer surge tank level | 3350mm (as of 5:00, 7/19) | 2150mm (as of 5:00, 7/19) | ※1 | 4150mm (as of 5:00, 7/19) | ※2 | | |
| Power source | Receiving offsite power (P/C2C) | | | Receiving offsite power (P/C4D) | | Receiving offsite power | |
| Others | *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: 35 °C (as of 5:35, 7/19) | 5u : SHC mode (from 14:45, 7/15) | 6u : SHC mode (from 10:02, 7/18) | |

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 | 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. (D/W : Dry Well, S/C : Suppression Chamber) | (D/W) Unit 1: Main recorder Unit 2/3 : 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) Main instrument panel 1 / 4 Ch (Unit 2/3) (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) | 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 or from the measurement reading of samples of main indicator and temporary insurument (Non-thermal mode : Urgent Heat load Mode, SHC mode : Shut down Cooling Mode) | Unit 1/2: Main recorder Unit 3/4: Temporary indicator | Main: 1 / 2 Ch (Unit 1) , 1 Ch (Unit 2) Temporary indicator: 1 / 1 system (Unit 3/4) |
| 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 06:00 on July 19 |
|------------------------------------|---|--|
| Instrument failure | Instrument failure : down of instrument reading (over) scale / failure of instrument | Unit 1 CAMS D/W radiation monitor, spent fuel pool temperature Unit 2 Pressure in S/C, CAMS S/C(B) radiation monitor Unit 3 Level of skimmer surge tanks |
| 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 |