## 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 06:0                                     | 00 on November 3   |  | of indicators into consideration.  |  |   |  |  |
|--|--|--|--|--|---|--|--|
| Unit   | Unit 1   | Unit 2   | Unit 3   | Unit 4   | Unit 5  | Unit 6   |  |
| Status of water<br>injection to the<br>reactor | Fresh water feeding<br>Feed water system 7.7m <sup>3</sup> /h<br>(as of 5:00 , 11/3)   | Fresh water feeding<br>Feed water system 3.0m <sup>3</sup> /h, CS line 7.1m <sup>3</sup> /h<br>(as of 5:00 , 11/3)           | Fresh water feeding<br>Feed water system 2.5m <sup>3</sup> /h, CS line 8.1m <sup>3</sup> /h<br>(as of 5:00 , 11/3) |  | %2<br>(Heat removal of the reactor is functioning, Water<br>injection is unnecessary) |  |  |
| Water level in the reactor                     | Fuel range A: Downscale<br>Fuel range B:-1780 mm X3<br>(as of 5:00 , 11/3)   | Fuel range A: Downscale %3<br>Fuel range B:-2107 mm %3<br>(as of 5:00 , 11/3)  | Fuel range B:-2173 mm<br>(as of 5:00 , 11/3)   | *3<br>*3   | Stoppage range<br>1830mm<br>(as of 6:00 , 11/3)                                       | Stoppage range<br>2077mm<br>(as of 6:00 , 11/3)                        |  |
| Pressure in the reactor                        | System A:0.013 MPa g<br>System B:-MPa g<br>(as of 5:00 , 11/3)   | System A:0.007 MPa g<br>System B:-MPa g<br>(as of 5:00 , 11/3)   |  | A) %3<br>(C) %3  | 0.010 MPa g<br>(as of 6:00 , 11/3)  | 0.016 MPa g<br>(as of 6:00 , 11/3)                                     |  |
| ater temperature of<br>the reactor             | (Since there is no water inflow in the system it is impossible to collect the data)  |  |  |  | 21.7 ℃<br>(as of 6:00 , 11/3)   | 23.1 ℃<br>(as of 6:00 , 11/3)  |  |
| emperature around<br>the reactor vessel        | Temperature in feed-water nozzle:49.5 °C<br>Temperature at reactor vessel bottom:50.2 °C<br>(as of 5:00 , 11/3)  | Temperature in feed-water nozzle:70.8 °C<br>Temperature at reactor vessel bottom:75.0 °C<br>(as of 5:00 , 11/3)              | Temperature in feed-water nozzle:64.0 °C<br>Temperature at reactor vessel bottom:70.4 °C<br>(as of 5:00 , 11/3)    | %2<br>(Monitoring is<br>unnecessary<br>since all fuel are                          | %2 (monitoring through water temperature of the reactor)                              |  |  |
| Pressure in D/W •<br>S/C                       | D/W:0.1243 MPa abs*2<br>S/C:0.092 MPa abs<br>(as of 5:00 , 11/3)   | D/W:0.110 MPa abs*<br>S/C: Downscale   | D/W:0,1015 MPa abs<br>S/C:0,1882 MPa abs<br>(as of 5:00 , 11/3)  | takeoff)   |   |  |  |
| D/W Atmosphere<br>temperature                  | RPV bellow seal:50.9 ℃<br>HVH return:52.1 ℃<br>(as of 5:00 , 11/3)   | RPV bellow seal:68.4°C %3<br>HVH return:76.4°C<br>(as of 5:00 , 11/3)  | RPV bellow seal:82.2 °C<br>HVH return:63.3 °C<br>(as of 5:00 , 11/3)   | *3   |   |  |  |
| CAMS radiation<br>monitor                      | D/W(A):1.00E-02Sv/h %1<br>(B):1.64E+01Sv/h %1<br>S/C(A):6.70E-01Sv/h<br>(B):6.90E-01Sv/h<br>(as of 5:00 , 11/3)  | D/W(A):7.77E+00Sv/h<br>(B):3.06E+00Sv/h<br>S/C(A):9.00E-02Sv/h<br>(B):3.32E+00Sv/h<br>(B):3.32E+00Sv/h<br>(as of 5:00, 11/3) | D/W(A):3.26E+00Sv/h<br>(B):2.22E+00Sv/h<br>S/C(A):2.72E-01Sv/h<br>(B):2.56E-01Sv/h<br>(as of 5:00, 11/3)           | *3   | (Monitoring is unnecessar)<br>reactor is functioning.)                                | onitoring is unnecessary since heat removal of<br>tor is functioning.) |  |
| Temperature in S/C                             | System A:45.6 °C<br>System B:45.6 °C<br>(as of 5:00 , 11/3)  | System A:54.3 °C<br>System B:54.4 °C<br>(as of 5:00 , 11/3)  | System A:42.1 °C<br>System B:42.3 °C<br>(as of 5:00 , 11/3)  |  |   |  |  |
| esigned usable D/W<br>pressure                 | 0,384MPa g (0.485MPa abs)  | 0.384MPa g (0.485MPa abs)  | 0.384MPa g (0.485MPa abs)  |  |   |  |  |
| esigned usable D/W<br>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             | 22.0 °C<br>(as of 5:00 , 11/3)   | 25.0°C<br>(as of 5:00 , 11/3)  | 23.4 °C<br>(as of 5:00 , 11/3)   | 31℃<br>(as of 5:00 ,<br>11/3)  | 24.4 °C<br>(as of 6:00 , 11/3)  | 24.5 ℃<br>(as of 6:00 , 11/3)  |  |
| PC skimmer surge<br>tank level                 | 4220mm<br>(as of 5:00 , 11/3)  | 3040mm<br>(as of 5:00 , 11/3)  | 4740mm<br>(as of 5:00 , 11/3)  | 4469mm<br>(as of 5:00 ,<br>11/3)   | *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 2 on 11/11 was corrected because it was incorrect,<br>*2 Data of Pressure in D/W of Unit 1 on 11/29 was corrected because it was incorrect. |  |  | Temperature in the<br>Common Spent<br>Fuel Storage:<br>25°C<br>(as of 10:20 , 11/2 | 5u : SHC mode<br>(from 10:46 ,10/26)  | 6u : SHC mode<br>(from 11:16 ,11/2                                     |  |

\*3 : continuously monitoring the status

## 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<br>injection to the<br>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   | Temporary          | System A 1/1Ch<br>System B 1/1Ch   |  |
| Pressure in the reactor                        | One representing value is noted among multiple data on each System A, B,<br>Readings of temporary instruments are represented in A system for Unit 1 and 2.  | Temporary          | 1 ∕ 1 system (Unit 1/2)<br>System A 1 ∕ 2Ch, System B 1 ∕ 2Ch (Unit 3)   |  |
| 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 (1U、3U:RPV Bottom Head、2U:RPV Wall<br>Above Bottom Head) are noted among multiple data to view the whole picture.  | Temporary          | Point of Feed-water nozzle 1/4Ch<br>reactor vessel bottom 1/2Ch (Unit1)<br>1/1Ch (Unit2/3)   |  |
| Pressure in<br>D/W • S/C                       | Data from temporary instrument.<br>(D/W:Dry Well、S/C:Suppression Chamber)  | Temporary          | (D/W)<br>wide range 1 / 1Ch (Unit 1)<br>1 / 1 system (Unit 2)<br>1 / 4Ch (Unit 3)<br>(S/C)<br>1 / 1system (Unit 1/2)<br>1 / 2Ch (Unit 3) |  |
|  | 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)   | Temporary          | RPV Bellows Air 1 ∕ 5Ch<br>D/W HVH return 1 ∕ 5Ch  |  |
| CAMS radiation<br>monitor                      | Data from temporary instrument.<br>(CAMS : Containment Atmospheric Monitoring System)  | Temporary          | D/W System A 1/1Ch<br>System B 1/1Ch<br>S/C System A 1/1Ch<br>System B 1/1Ch   |  |
| Temperature in S/C                             | Data from temporary instrument. One representing value is noted among multiple data on each System A, B.   | Temporary          | System A1/4Ch (Unit 1)、8Ch (Unit 2/3)<br>System B1/4Ch (Unit 1)、8Ch (Unit 2/3)   |  |
| Temperature in the spent fuel pool             | Data from temporary instrument.<br>(Non-thermal mode : Urgent Heat load Mode、SHC mode : Shut down Cooling Mode)  | Temporary          | 1 / 1 Ch (Unit 2)<br>1 / 1 system (Unit 1/3/4)   |  |
| FPC skimmer surge<br>tank level                | <ul> <li>Unit2, 4 are the FPC skimmer surge tank level measured temporary instrument.</li> <li>Unit1, 3 are the FPC skimmer surge tank level estimated from temporary pressure gages.(reference value) (FPC :<br/>Fuel Pool Cooling system)</li> </ul> | Temporary          | 1/1system  |  |

## ■Supplemental explanation for notes

| ltem                                  | Contents  | Status As of 06:00 on November 3   |  |  |
|---------------------------------------|---|--|--|--|
| 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 $-$  |  |  |
|                                       | Unit4: Monitoring is not implemented since all fuel are takeoff.<br>Unit5/6: Monitoring is not implemented since heat removal of reactor is functioning | -  |  |  |
| Continuously<br>monitoring the status | Inaccurate Data defined from relation with other Parameters such as negative figure.  | Unit 1 Reactor water level(B)<br>Unit 2 Reactor water level, RPV bellow air temperature,<br>Unit 3 Reactor water level, reactor pressure, RPV bellow air temperature,<br>CAMS D/W(A) radiation monitor |  |  |