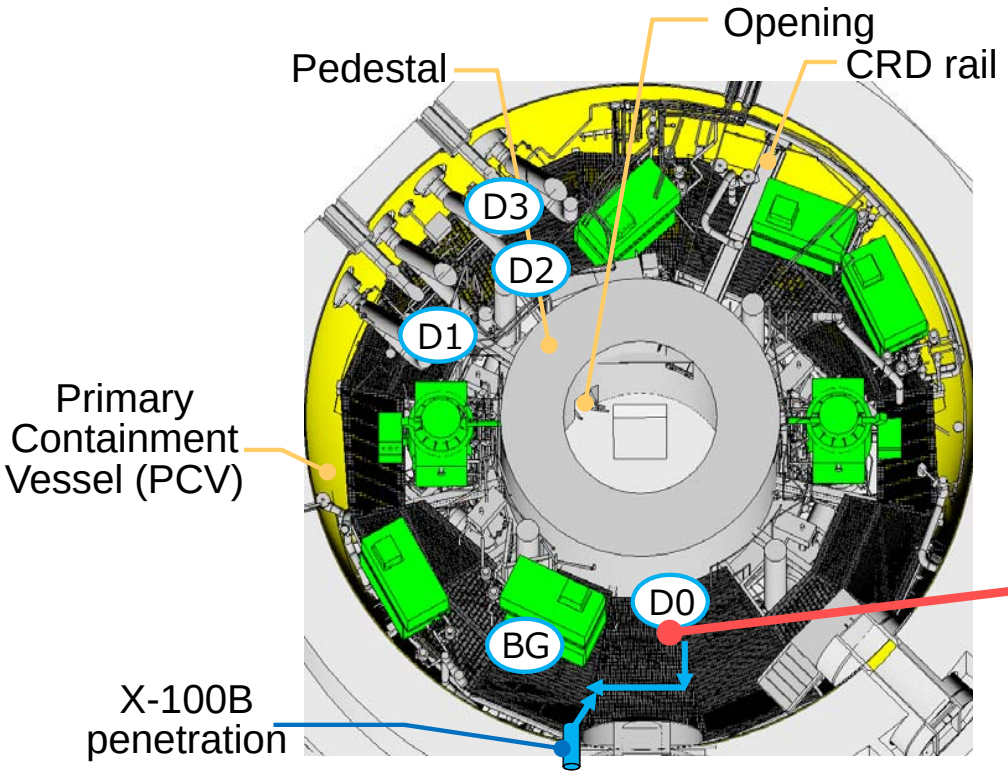
1.Progress of Unit 1 PCV internal investigation
(Preliminary report of March 18 investigation) 1/2

Reference
March 19, 2017
Tokyo Electric Power Company Holdings, Inc.

- March 18 investigation results are as follows.



Cross section of 1st floor PCV

→ Access route for March 18 investigation

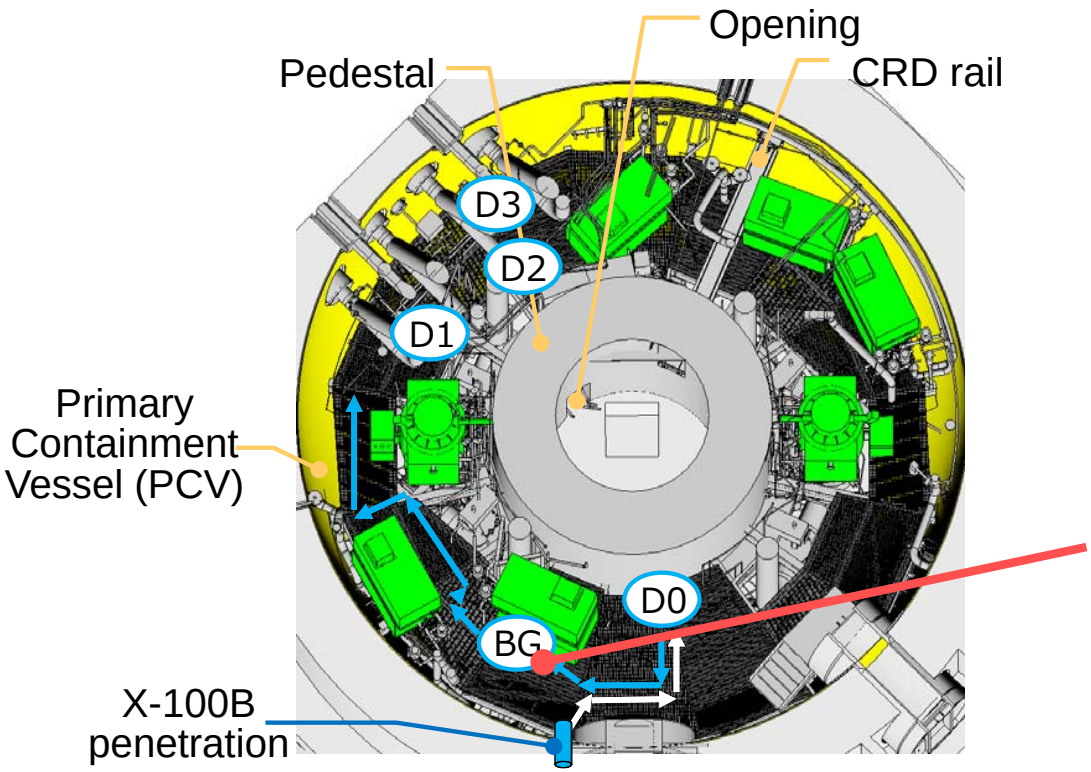
Measurement point	Contents of estimation, etc.
D0	Estimation of presence or absence of diffusion of fuel debris from the drain sump
D1, D2	Estimation of presence or absence of diffusion of fuel debris from the opening
D3	Estimating whether or not the fuel debris is likely to have reached the PCV shell
BG	Understanding the background level corresponding to measurement of D0 - D3

On the metal grating
(Front left-side camera of the investigation device)

Measurement unit camera before inserted into the water

1.Progress of Unit 1 PCV internal investigation
(Preliminary report of March 18 investigation) 2/2

- March 18 investigation results are as follows.

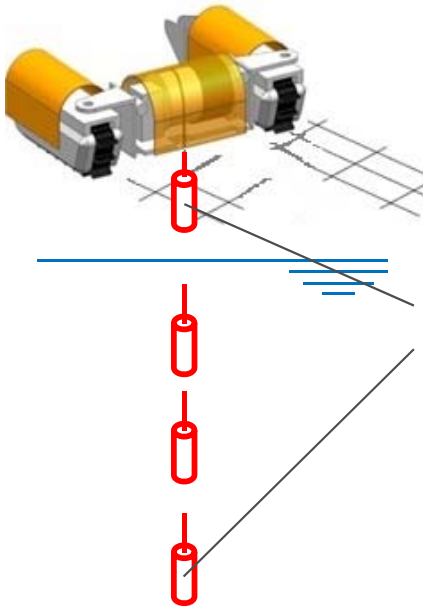


Cross section of 1st floor PCV

Access route for March 18 investigation

Measurement point	Contents of estimation, etc.
D0	Estimation of presence or absence of diffusion of fuel debris from the drain sump
D1, D2	Estimation of presence or absence of diffusion of fuel debris from the opening
D3	Estimating whether or not the fuel debris is likely to have reached the PCV shell
BG	Understanding the background level corresponding to measurement of D0 - D3

Underwater image at measuring point D0



Measurement image

Radiation dose at measurement point D0
(Provisional values)
- On metal gating: 7.8 Sv/h
- The lowest point: 1.5 Sv/h

(About 1m above the PCV basement floor*)

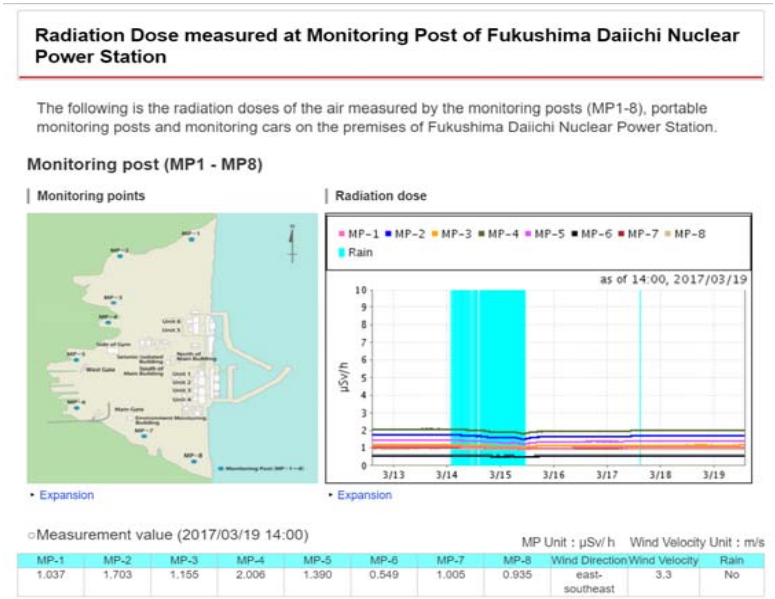
The conditions of PCV basement will be evaluated after organizing digital images and radiation data.

*The exact height from the PCV basement floor will be examined later.

3. Impact to the surrounding environment

- **The radiation level of 7.8 Sv/h was measured by a dosimeter during the March 18 investigation, but the radiation impact has been reduced by the shielding of PCV concrete walls and steel. No radiation impact has been observed in the surrounding environment.**
- **The investigation is conduced while creating a boundary around the guiding pipe to prevent the air inside the PCV from leaking to the outside.**
- **No significant changes have been observed at the monitoring posts and dust monitors after the investigation, compared to the before.**
- **Real-time data of the monitoring posts and dust monitors along the site boundary are available on the website.**

Reference URL: http://www.tepco.co.jp/en/nu/fukushima-np/f1/index-e.html
http://www.tepco.co.jp/en/nu/fukushima-np/f1/dustmonitor/index-e.html



Radiation Dose measured at Monitoring Post of Fukushima Daiichi Nuclear Power Station

The following is the radiation doses of the air measured by the monitoring posts (MP1-8), portable monitoring posts and monitoring cars on the premises of Fukushima Daiichi Nuclear Power Station.

Monitoring post (MP1 - MP8)

Monitoring points | Radiation dose

MP-1 MP-2 MP-3 MP-4 MP-5 MP-6 MP-7 MP-8 Rain

as of 14:00, 2017/03/19

μSv/h

3/13 3/14 3/15 3/16 3/17 3/18 3/19

Expansion Expansion

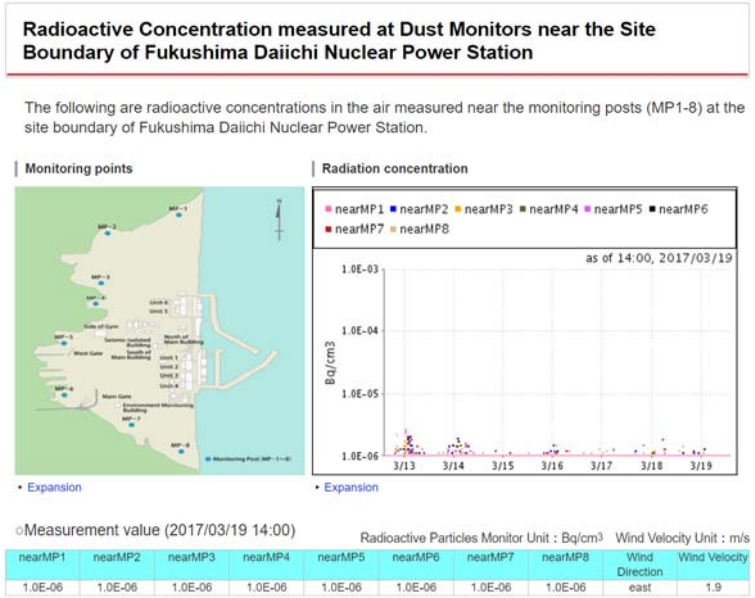
Measurement value (2017/03/19 14:00)

MP Unit : μSv/h Wind Velocity Unit : m/s

MP-1	MP-2	MP-3	MP-4	MP-5	MP-6	MP-7	MP-8	Wind Direction	Wind Velocity	Rain
1.037	1.703	1.155	2.006	1.390	0.549	1.005	0.935	east-southeast	3.3	No

As of 11:40 a.m. on March 19, 2017: about 0.5-2.0 μSv/h

*Radiation dose including the other influence than the PCV interior



Radioactive Concentration measured at Dust Monitors near the Site Boundary of Fukushima Daiichi Nuclear Power Station

The following are radioactive concentrations in the air measured near the monitoring posts (MP1-8) at the site boundary of Fukushima Daiichi Nuclear Power Station.

Monitoring points | Radiation concentration

nearMP1 nearMP2 nearMP3 nearMP4 nearMP5 nearMP6 nearMP7 nearMP8

as of 14:00, 2017/03/19

Bq/cm3

1.0E-03 1.0E-04 1.0E-05 1.0E-06

3/13 3/14 3/15 3/16 3/17 3/18 3/19

Expansion Expansion

Measurement value (2017/03/19 14:00)

Radioactive Particles Monitor Unit : Bq/cm3 Wind Velocity Unit : m/s

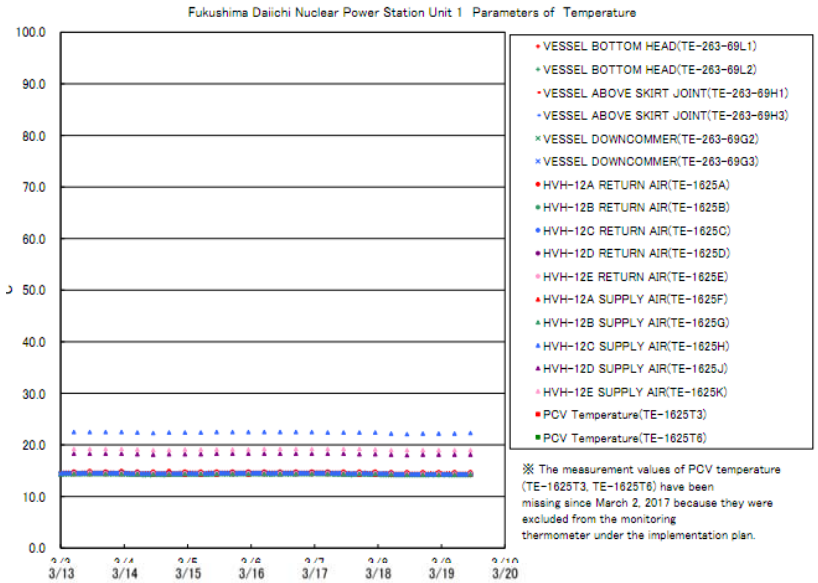
nearMP1	nearMP2	nearMP3	nearMP4	nearMP5	nearMP6	nearMP7	nearMP8	Wind Direction	Wind Velocity
1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06	1.0E-06	east	1.9

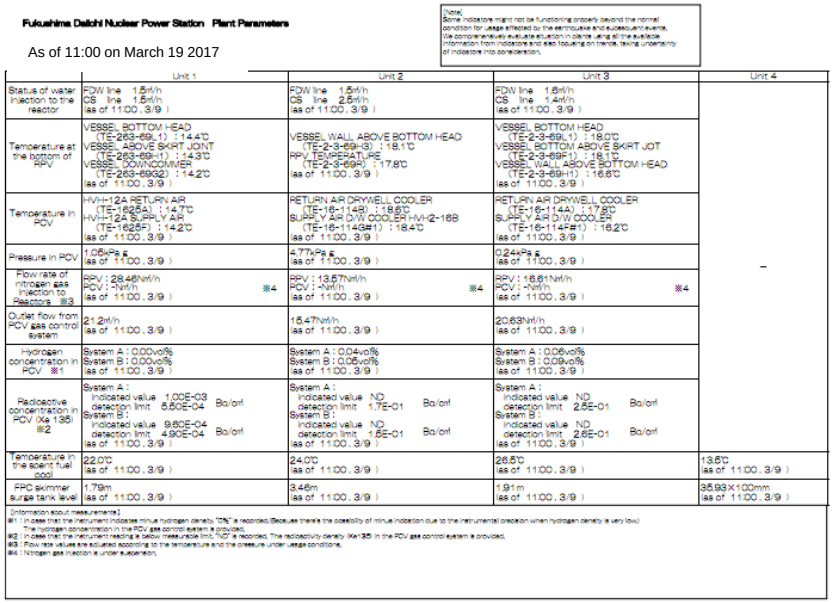
As of 11:50 a.m. on March 19, 2017: 1.0E-06Bq/cm3

4. Monitoring of the plant parameters

- **Although the radiation level of 7.8 Sv/h was measured by a dosimeter during the March 18 investigation, it does not mean that a new phenominon has occurred but rather the area that has not been investigated since the March 2011 accident was investigated for the first time.**
- **Plant parameters are monitored all the time during the investigation, and no significant changes have been observed in the PCV internal temperatures after the investigation, compared to the before. The condition of cold shutdown has not been changed.**
- **Temperature data inside the PCV are available on the website.**

Reference URL: http://www.tepco.co.jp/en/nu/fukushima-np/f1/pla/index-e.html





Fukushima Daiichi Nuclear Power Station Plant Parameters

As of 11:00 on March 19 2017

	Unit 1	Unit 2	Unit 3	Unit 4
Status of water injection to the reactor	FDW line 1.5m³/h CS line 1.5m³/h (as of 11:00, 3/9)	FDW line 1.5m³/h CS line 2.5m³/h (as of 11:00, 3/9)	FDW line 1.6m³/h CS line 1.4m³/h (as of 11:00, 3/9)	
Temperature at the bottom of RPV	VESSEL BOTTOM HEAD (TE-263-69L1) : 14.4℃ VESSEL ABOVE SKIRT JOINT (TE-263-69H1) : 14.3℃ VESSEL DOWNCOMMER (TE-263-69G2) : 14.2℃ (as of 11:00, 3/9)	VESSEL WALL ABOVE BOTTOM HEAD (TE-2-3-69H-3) : 18.1℃ RPV TEMPERATURE (TE-2-3-69H) : 17.8℃ (as of 11:00, 3/9)	VESSEL BOTTOM HEAD (TE-2-3-69L1) : 16.0℃ VESSEL BOTTOM ABOVE SKIRT JOT (TE-2-3-69H1) : 16.1℃ VESSEL WALL ABOVE BOTTOM HEAD (TE-2-3-69H1) : 16.6℃ (as of 11:00, 3/9)	
Temperature in PCV	HVH-12A RETURN AIR (TE-1625A) : 14.7℃ HVH-12A SUPPLY AIR (TE-1625F) : 14.2℃ (as of 11:00, 3/9)	RETURN AIR DRYWELL COOLER (TE-16-114B) : 18.6℃ SUPPLY AIR D/W COOLER HVH-2-16B (TE-16-114G#1) : 18.4℃ (as of 11:00, 3/9)	RETURN AIR DRYWELL COOLER (TE-16-114A) : 17.9℃ SUPPLY AIR D/W COOLER (TE-16-114F#1) : 16.2℃ (as of 11:00, 3/9)	
Pressure in PCV	1.05kPa a (as of 11:00, 3/9)	4.77kPa a (as of 11:00, 3/9)	0.24kPa a (as of 11:00, 3/9)	-
Flow rate of nitrogen gas injection to Reactors ※3	RPV : 28.48Nm³/h PCV : -Nm³/h (as of 11:00, 3/9) ※4	RPV : 13.57Nm³/h PCV : -Nm³/h (as of 11:00, 3/9) ※4	RPV : 18.61Nm³/h PCV : -Nm³/h (as of 11:00, 3/9) ※4	
Outlet flow from PCV gas control system	21.2m³/h (as of 11:00, 3/9)	15.47Nm³/h (as of 11:00, 3/9)	20.63Nm³/h (as of 11:00, 3/9)	
Hydrogen concentration in PCV ※1	System A : 0.00vol% System B : 0.00vol% (as of 11:00, 3/9)	System A : 0.04vol% System B : 0.05vol% (as of 11:00, 3/9)	System A : 0.06vol% System B : 0.09vol% (as of 11:00, 3/9)	
Radioactive concentration in PCV (Xe 135) ※2	System A : indicated value 1.00E-03 Bq/cm³ detection limit 5.60E-04 System B : indicated value 9.60E-04 Bq/cm³ detection limit 4.90E-04 (as of 11:00, 3/9)	System A : indicated value ND detection limit 1.7E-01 Bq/cm³ System B : indicated value ND detection limit 1.6E-01 Bq/cm³ (as of 11:00, 3/9)	System A : indicated value ND detection limit 2.6E-01 Bq/cm³ System B : indicated value ND detection limit 2.6E-01 Bq/cm³ (as of 11:00, 3/9)	
Temperature in the spent fuel pool	22.0℃ (as of 11:00, 3/9)	24.0℃ (as of 11:00, 3/9)	26.5℃ (as of 11:00, 3/9)	13.5℃ (as of 11:00, 3/9)
FPC skimmer surge tank level	1.79m (as of 11:00, 3/9)	3.46m (as of 11:00, 3/9)	1.91m (as of 11:00, 3/9)	95.93×100mm (as of 11:00, 3/9)

[Information about measurements]
※1 : In case that the instrument indicates minus hydrogen density, "0%" is recorded.Because there's the possibility of minus indication due to the instrumental precision when hydrogen density is very low.)
The hydrogen concentration in the PCV gas control system is provided.
※2 : In case that the instrument reading is below measurable limit, "ND" is recorded. The radioactivity density (Xe135) in the PCV gas control system is provided.
※3 : Flow rate values are adjusted according to the temperature and the pressure under usage conditions.
※4 : Nitrogen gas injection is under suspension.

As of 12:00 p.m. on March 19, 2017: about 14-23 ℃