

Investigation Results of the Inside of Unit 1 PCV at Fukushima Daiichi Nuclear Power Station

October 15, 2012

Tokyo Electric Power Company

Investigation items

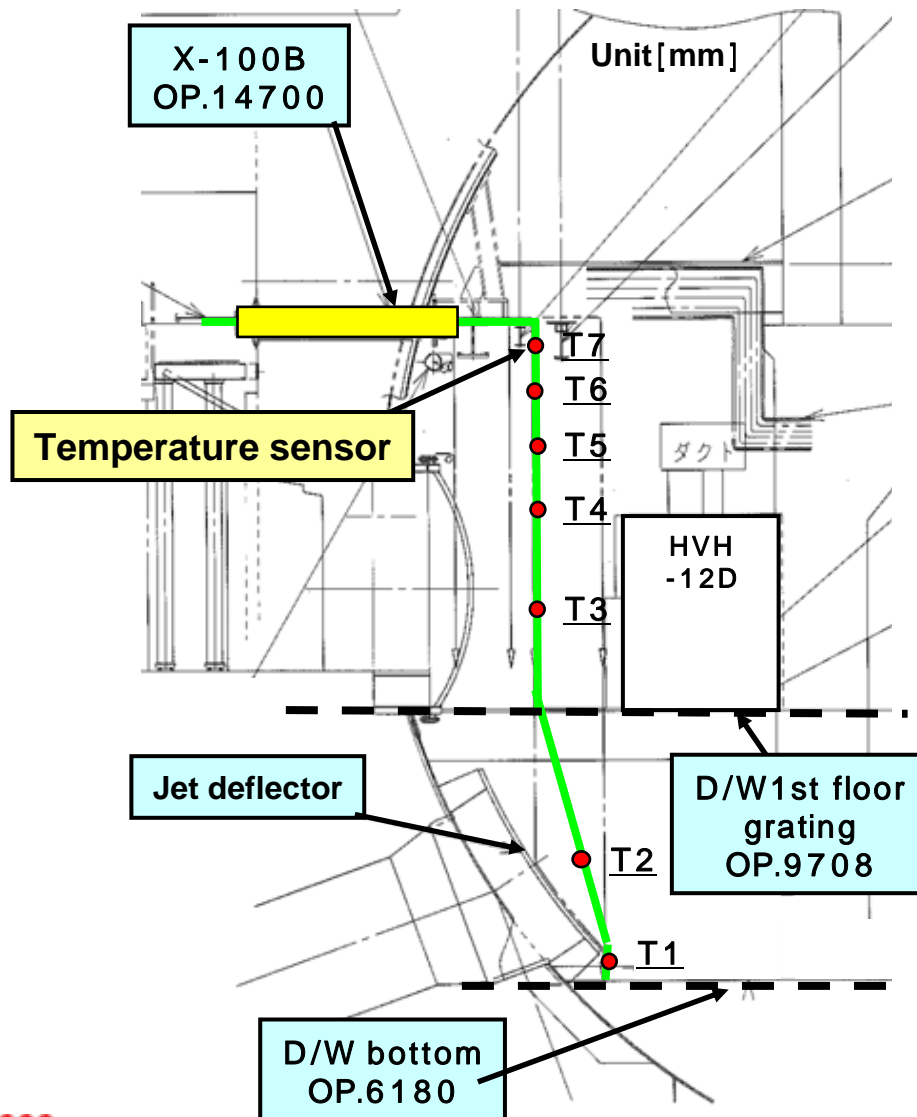
The following items are to be investigated by inserting an equipment from X100B penetration (where a hole was punched on September 26).

No.	Date	Investigation	Device	Maximum Individual radiation exposure dose [mSv/person per day]
1	Oct. 9	Videotape the inside of PCV using a pan-tilt camera (Above the grating on the first floor)	Pan-tilt camera	2.74
2	Oct. 10	Measure the accumulated water level and the 2 atmosphere dose	CCD camera Dosimeter	2.13
3	Oct. 11	Videotape the inside of PCV using a CCD camera (Below the grating on the first floor)	CCD camera	1.83
4	Oct. 12	Collect samples of accumulated water	Sampling device	1.72
5	Oct. 13	Install the permanent monitoring instrument (Ambient temperature, accumulated water temperature/level)	Thermocouple, water level sensor	2.33

* Planned radiation exposure dose: 10mSv/person per day

Installation of the Permanent Thermometer/ Water Level Gauge for the investigation of the Inside of Unit 1 PCV

Comparison between the original thermometer



New thermometer

[Data as of October 13 13:00]

T7	OP.14500	35.1
T6	OP.14000	34.8
T5	OP.13230	34.6
T4	OP.12500	34.3
T3	OP.11200	34.1
T2	OP.7500	37.4
T1	OP.6330	37.0

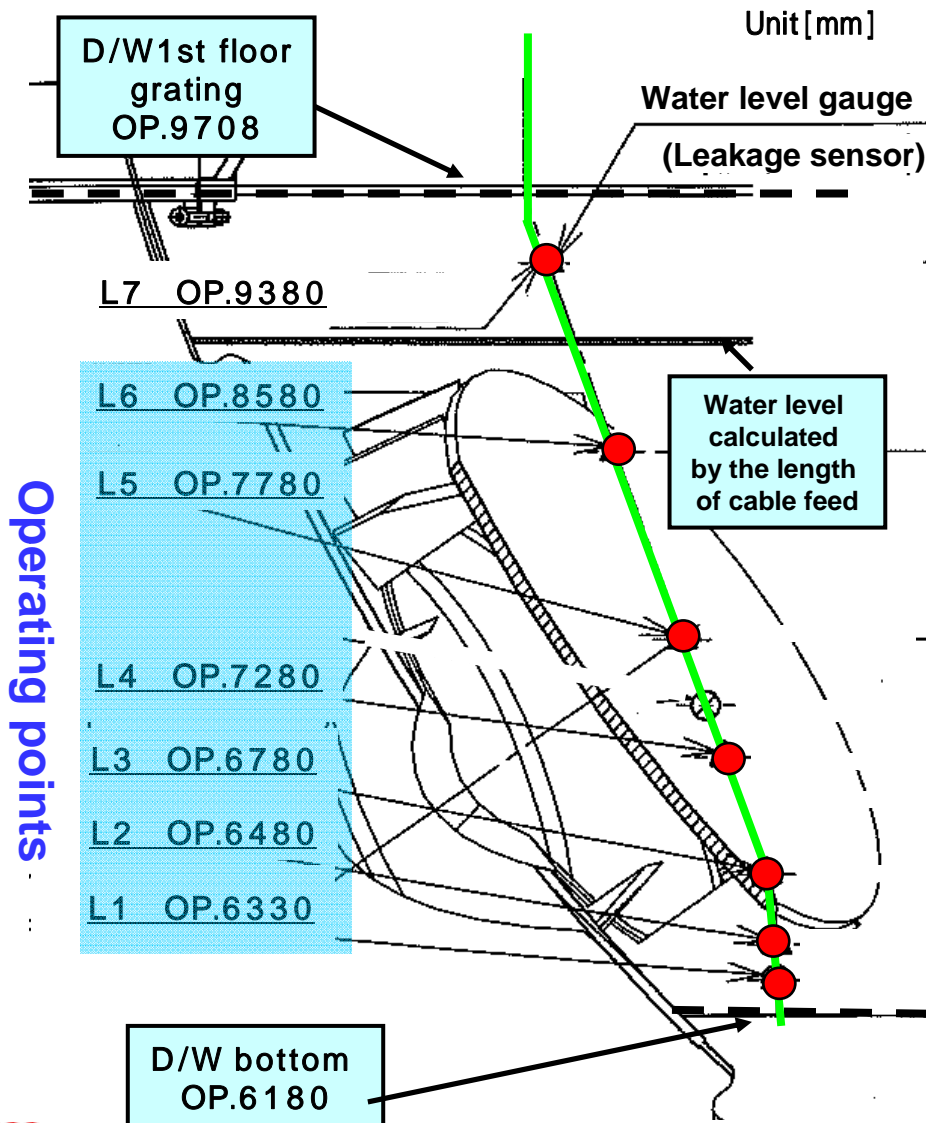
Original thermometer

[Data as of October 13 13:00]

OP.14000	TE-1625J HVH12D supply	41.5
OP.11200	TE-1625D HVH12D return	34.4

Installation of the Permanent Thermometer/ Water Level Gauge for the investigation of the Inside of Unit 1 PCV

Confirming the operating points of the water level gauge inside the PCV



L1 ~ L6: sensor was active,
L7: sensor was non-active,
which means that
PCV water level is within
L6 : 8580 ~ L7 : 9380mm

conformed with the water level
calculated by the length of cable
feed: approx. 9000mm (measured
on October 10)

Installation of the Permanent Thermometer/ Water Level Gauge for the investigation of the Inside of Unit 1 PCV

■ Conclusion

1. PCV temperature

We confirmed that the DC resistance values of the newly installed thermocouples are within the judging value. Additionally, the thermocouples indicated almost the same value as the original thermometer (monitoring thermometer), which means the installation has been done without any problems.

2. PCV water level

We confirmed that the water level gauges have been installed properly by the results that the operation points of the gauges conformed with the water level calculated by the length of cable feed.

■ Next step to check the installed instruments

We will check the correlations between the values of the installed instruments and the original PCV ambient temperature, the behavior they show in times of changes in water injection amounts or outside temperature within about 1 month. After the checking, we will review whether the instruments could be used to monitor the cooling of the reactor.