For Reference

Investigation Results of the Inside of Unit 3's Primary Containment Vessel (PCV)

(Prompt report as of October 20)

October 20, 2015

Tokyo Electric Power Company

TEPCO 東京電力

1. Investigation inside the PCV (image, temperature, radiation dose)

- The investigation is conducted to confirm the cooling condition and to acquire information for further researches and examination, by inserting investigation devices such as cameras, a thermometer and a dosimeter through the PCV's penetration path (X-53) in Unit3.

Investigation Device	Investigation Range
[1] Pan-tilt camera and dosimeter	<u>Penetration Path (in vapor phase)</u> ①Checking the condition of structures inside PCV ②Measuring radiation dose in vapor phase ③Checking access routes and obstacles to investigate inside the pedestal in the future • at the end of X-53 penetration path
[2] CCD camera and thermometer	<u>Penetration Path to the Bottom of PCV (from vapor phase to underwater)</u> ④Checking the water level inside PCV ⑤Checking temperature distribution inside PCV ⑥Checking the condition of PCV's inner wall ⑦Checking the condition of sediments at the bottom of PCV

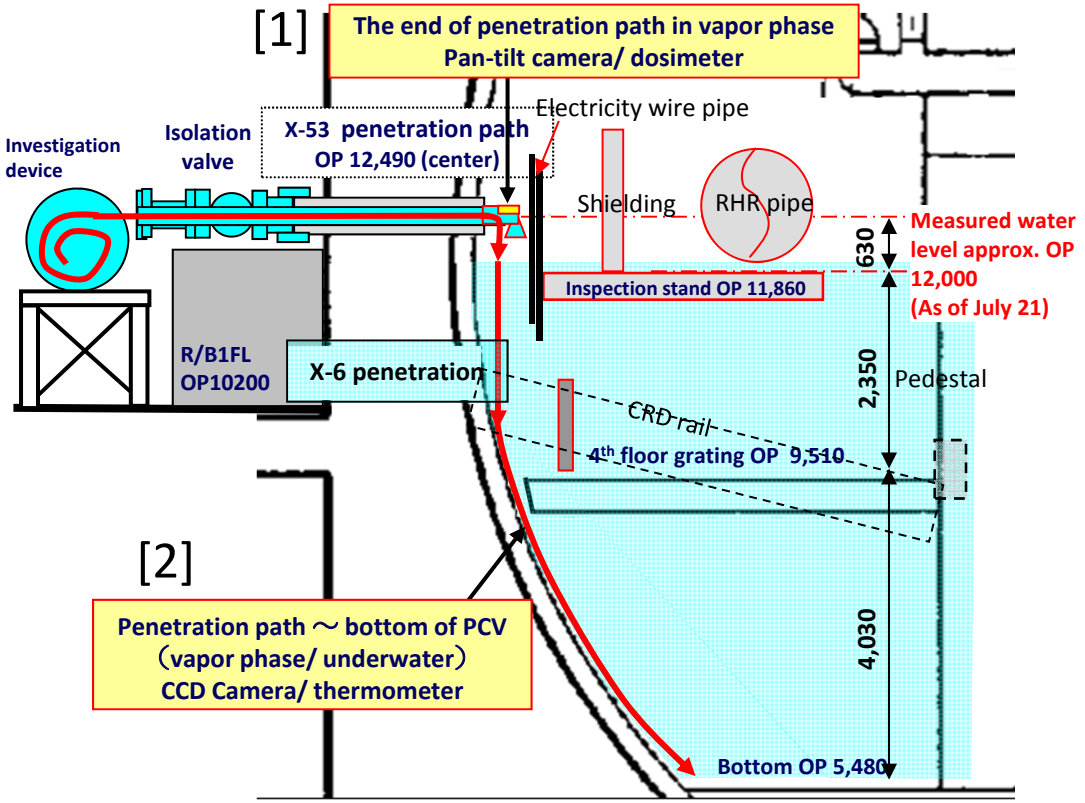
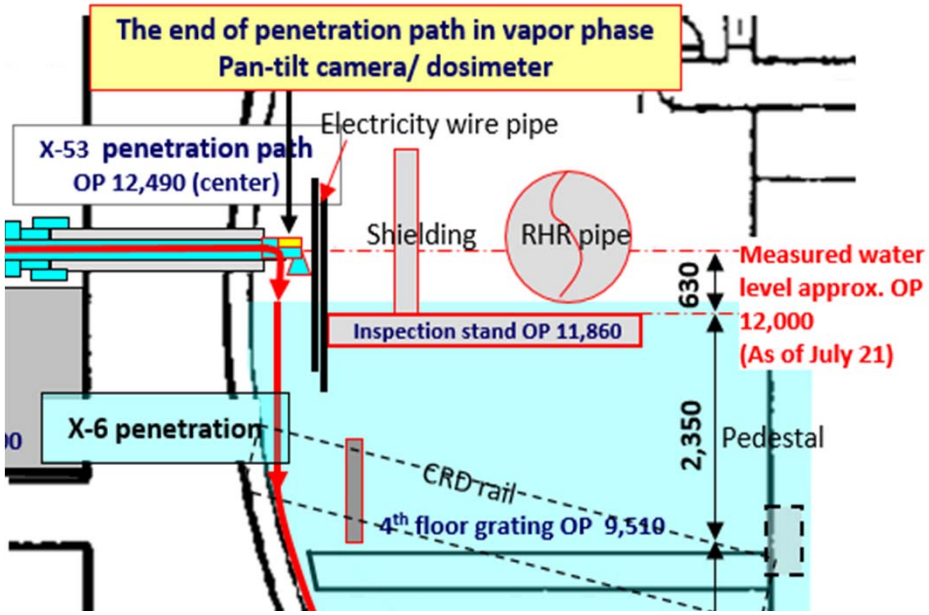


Image of the Investigation inside the PCV

*CRD: Control Rod Drive, RHR: Residual Heat Removal System, R/B: Reactor Building

2. [1] Investigation Results of Pan-tilt Camera and Dosimeter

- No damage of the structures inside the PCV (RHR pipe, D/W spray sparger, interior lights) and the PCV's inner wall was found within the investigation range.
- The most radiation dose measured in vapor phase inside the PCV was approximately 1 Sv/h.



No.	Measurement Points	Measurement Values
①	In the vicinity of the PCV's inner wall	Approx. 1 Sv/h
②	550mm away from the end of penetration path	Approx. 0.75 Sv/h

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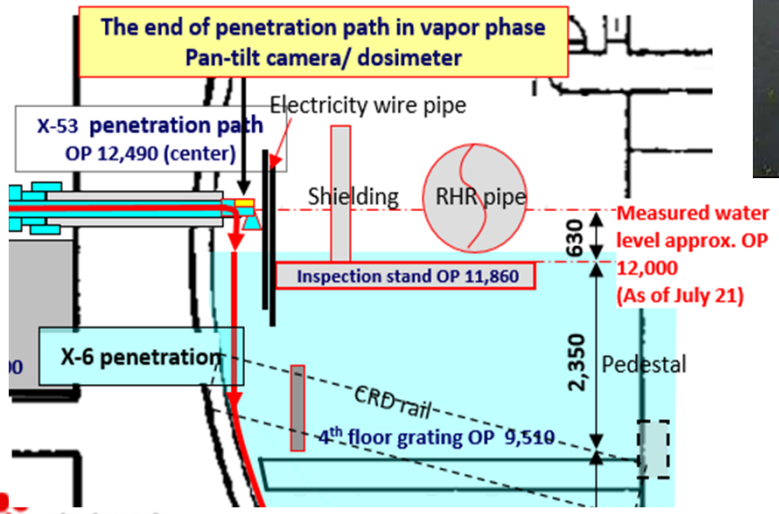
3. [1] Investigation Results of Pan-tilt Camera and Dosimeter

Images toward upper direction

D/W spray sparger



RHR pipe and PCV' inner wall

Interior light

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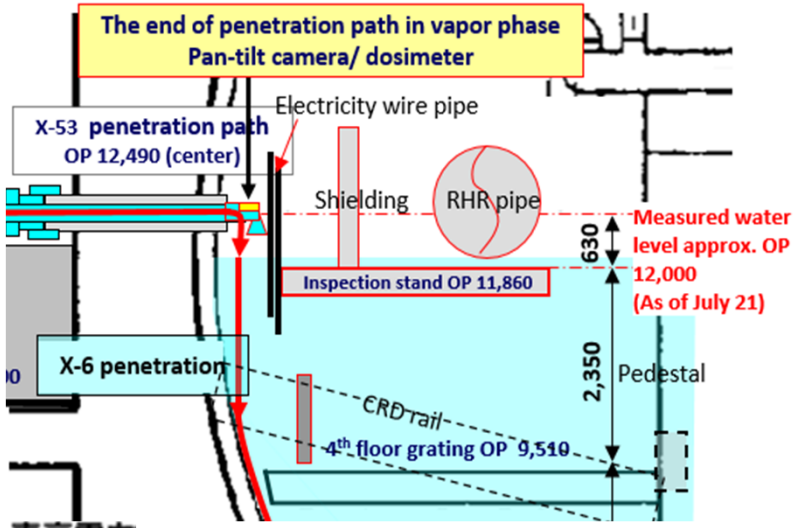
4. [1] Investigation Results of Pan-tilt Camera and Dosimeter

Images toward front and lower directions

The bottom of inspection stand (with water surface)

RHR pipe



Support of shielding

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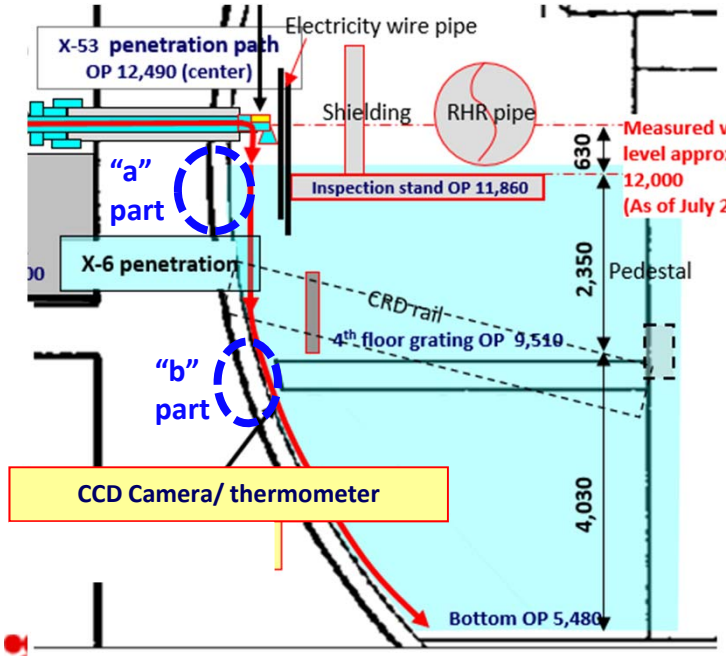
5. [2] Investigation Results of CCD Camera and Thermometer

- The investigation was conducted from the X-53 penetration path to the 1st floor grating because the space between the 1st floor grating and the PCV's inner wall was narrow and filled with sediments.
- No damage on the PCV's inner wall was found within the investigation rage.

Images of PCV' inner wall underwater



CCD camera

"a" part

"b" part

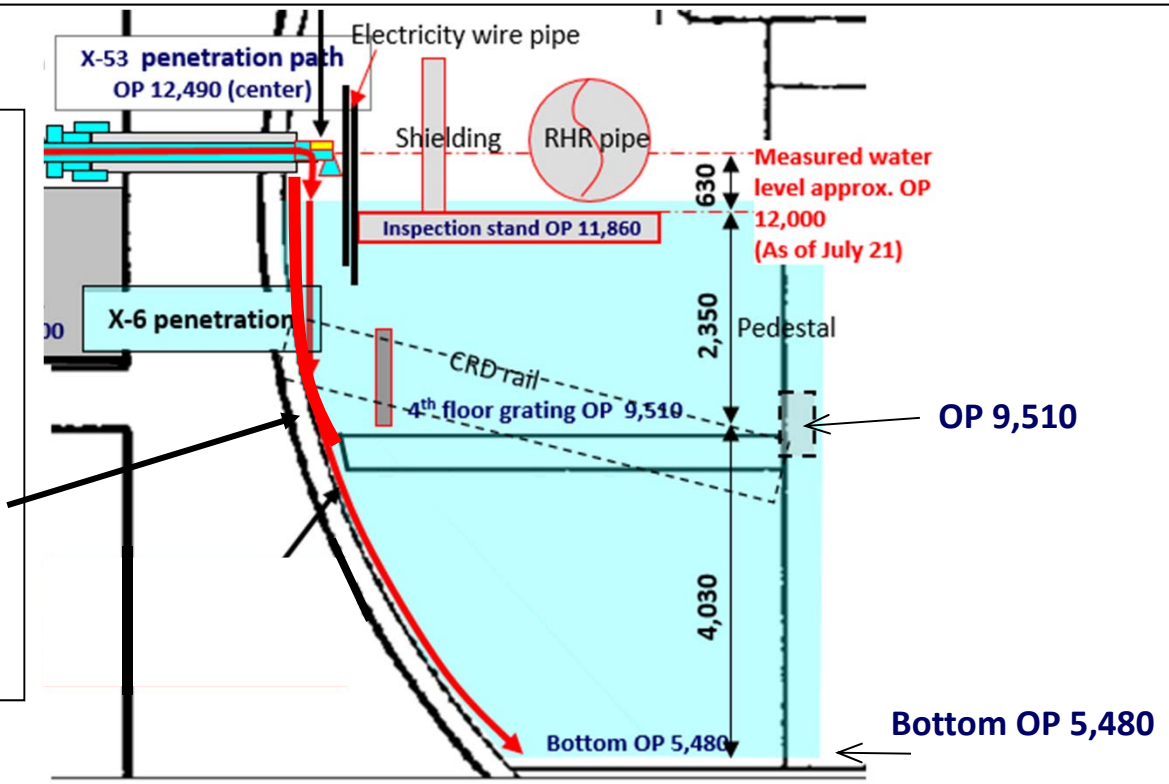
6. [2] Investigation Results of CCD Camera and Thermometer

- The water level inside the PCV mostly agreed with the estimated level*, by investigating the water surface inside of the PCV in the vicinity of the upper surface of inspection stand (under evaluation). (*OP: approx. 12,000)
- The temperatures inside the PCV were approx. 26～27℃ in vapor phase and approx. 33～35℃ underwater.

Temperature measurement points:

7 measurement points at approx. 500 mm intervals from the end of penetration path to the 1st floor grating*

*The measurements were conducted to the extent possible because the camera could not be inserted to the bottom of PCV.



*CRD: Control Rod Drive, RHR: Residual Heat Removal System, R/B: Reactor Building.

7. Summary

- No damage of the structures inside the PCV (RHR pipe, D/W spray sparger, interior lights) and the PCV's inner wall was found within the investigation range.
- The water level inside the PCV mostly agreed with the estimated level*, by investigating the water surface inside of the PCV in the vicinity of the upper surface of inspection stand (under evaluation). (*OP: approx. 12,000)
- The most radiation dose measured in vapor phase inside the PCV was approximately 1 Sv/h.
- The temperatures inside the PCV were approx. 26～27℃ in vapor phase and approx. 33～35℃ underwater.

8. Schedule planned for the investigation inside the Unit 3's PCV

Investigation \ Date	October						
	20	21	22	23	24	25	26
	TUE	WED	THU	FRI	SAT	SUN	MON
[1] Pan-tilt camera and dosimeter [2] CCD camera and thermometer							
Carrying in the sampling device							
[3] Sampling the retained water inside PCV and pan-tilt camera				(Spare day)			(Spare day)

○Estimated work time
- 3:00 a.m. ～ 8:00 a.m.