Investigation Results inside the Unit 3's PCV at Fukushima Daiichi Nuclear Power Station (Prompt report as of October 22)

For Reference
October 22, 2015
Tokyo Electric Power Company

- The evaluation and confirmation of corrosive environment inside the PCV will be conducted by sampling and analyzing the retained water inside the PCV. The information will be acquired to explore examination methods for future research.

Analysis Items (plan)		Purpose
pH		Evaluation on corrosive environment
Conductivity [μS/cm]		
Chlorine concentration [ppm]		
γ radioactivity concentration [Bq/cm^3]	Cs134	Release of radioactive materials Nuclide migration behavior
	Cs137	
	I-131	
Tritium concentration [Bq/cm^3]		
Sr89/90 concentration [Bq/cm^3]		
α radioactivity concentration [Bq/cm^3]		

*the same analysis items as Unit 1 and Unit 2

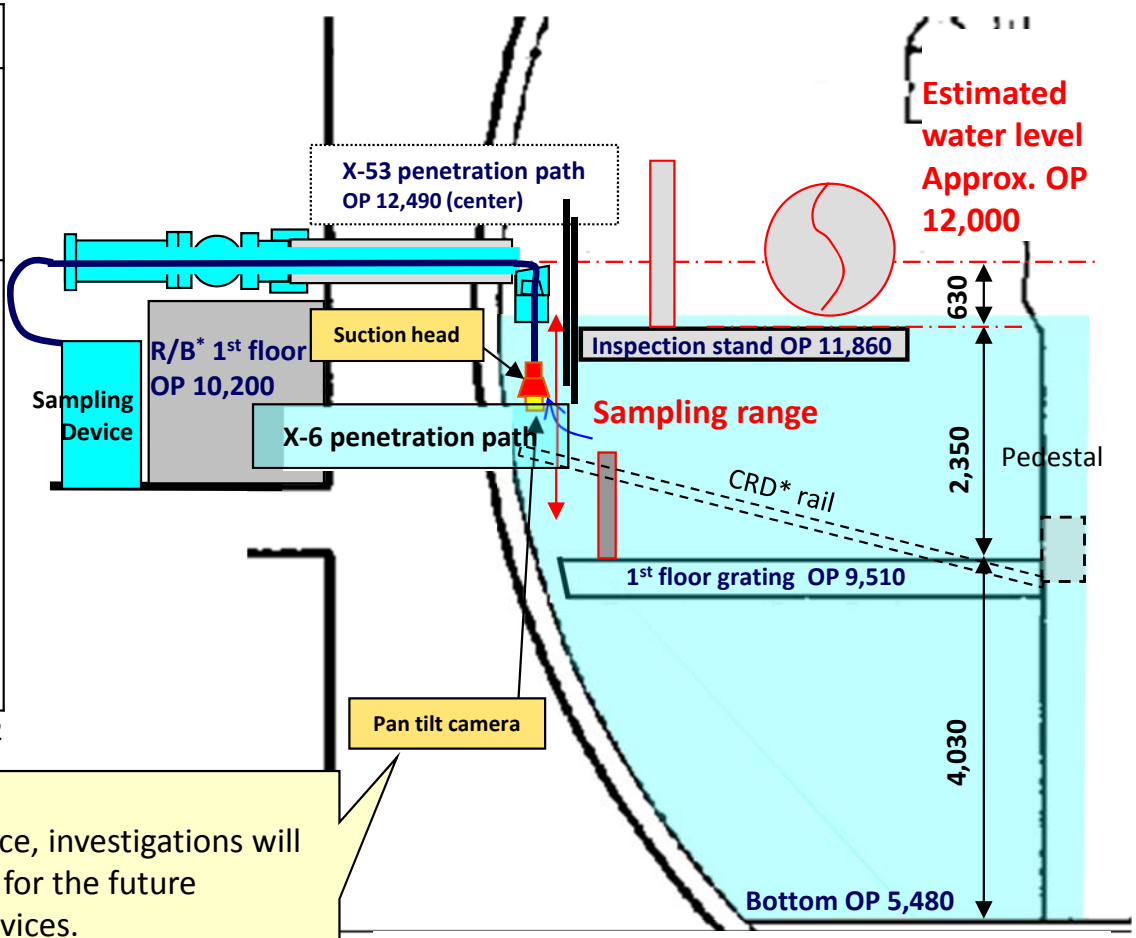


Image of Sampling Retained Water

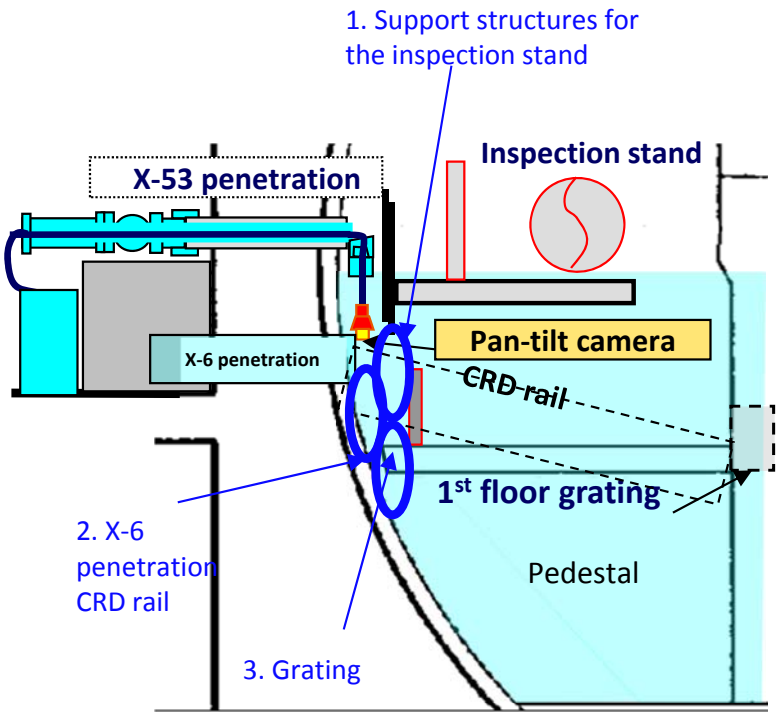
[Investigation by the pan-tilt camera]
Using the pan-tilt camera attached to the water sampling device, investigations will be conducted to check the access route and any obstructions for the future pedestal investigation and to acquire information to design devices.
- In the vicinity of X-6 penetration path
- 1st floor grating
- In the vicinity of CRD* rail

[Supplement] The investigation by the pan-tilt camera is conducted to the extent possible due to the restriction of camera capacity and environment inside the PCV.

*PCV: Primary Containment Vessel
*CRD: Control Rod Drive
*R/B: Reactor Building

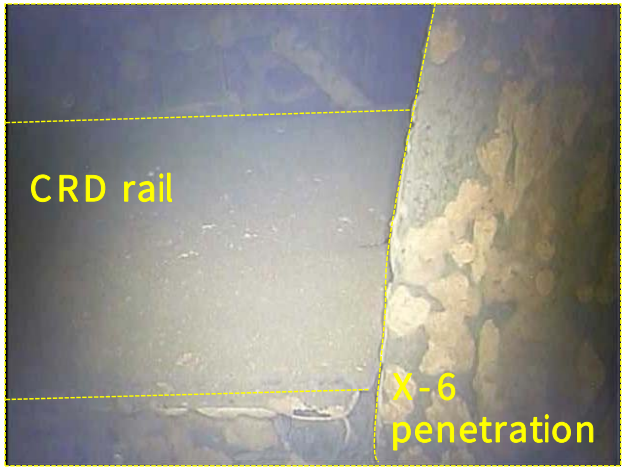
Investigation Results by the Pan-tilt Camera of Sampling Device

- No damage of the structures inside the PCV (electricity wire pipe, support structures, X-6 penetration, CRD rail) and the PCV's inner wall was found within the investigation range.
- Sediments were found on the CRD rail and 1st floor grating.

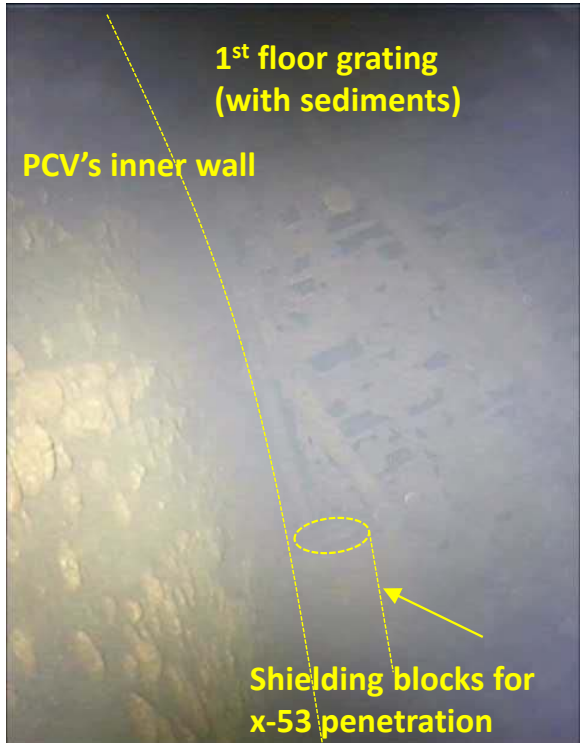


1. Support structures for the inspection stand

2. X-6 penetration and CRD rail



3. 1st floor grating



Summary

- 800 ml of retained water was sampled at two sampling points in the vicinity of retained water surface (approx. 0.1m below) and at approx. 0.7m below the surface.
- No damage of the structures inside the PCV (electricity wire pipe, support structures, X-6 penetration, CRD rail) and the PCV's inner wall was found within the investigation range.
- Sediments were found on the CRD rail and 1st floor grating.
- No obstacles were found to install PCV's permanent monitoring instruments.

Schedule planned for Unit 3