Investigation Result of Inside of the Primary Containment Vessel (PCV), 1F-2 (second Investigation)

March 22, 2012

Tokyo Electric Power Company



1. Objectives

Result of the First Investigation of Inside of the PCV

First Investigation of Inside of the Primary Containment Vessel (PCV) was conducted on January 19, 2012

- The pictures of inside of the PCV were taken, and the atmospheric temperature was measured.
- However, the water level of the accumulated water was not confirmed.



Objective of Second Investigation

- Grasp temperature and water level in order to confirm maintenance of cold shutdown state of the reactor.
- By measuring the ambient radiation dose inside the PCV, get basic data for future planning of decommissioning.



2. Outline of Implementation

Scheduled date

March 26(Mon), 27(Tue)

Investigation Items

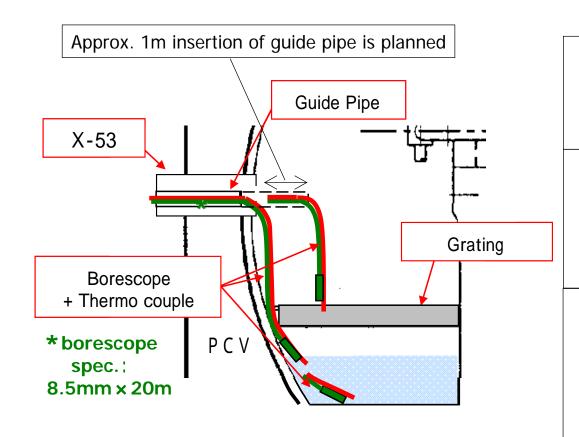
- ·Water Level of the Accumulated Water (Mar. 26)
- ·Water Temperature of the Accumulated Water (Mar. 26)
- ·Ambient Radiation Dose inside the PCV) (Mar. 27)

Planned Radiation

10 mSv/(Person·day)

3. Investigation Plan(Water Level and Temperature)

Measurement of the water level and temperature of the accumulated water inside the PCV is to be conducted by inserting a borescope and thermo couple from the penetrating part of the PCV (X-53 penetration, 1FL R/B) as well as the first investigation.



Insert a borescope and thermo couple through the gap between internal wall and the grating of the PCV, or through the grating.

Extend guide pipe in the direction of the center of the PCV, and insert the grating, and then measure the ambient temperature and take pictures.

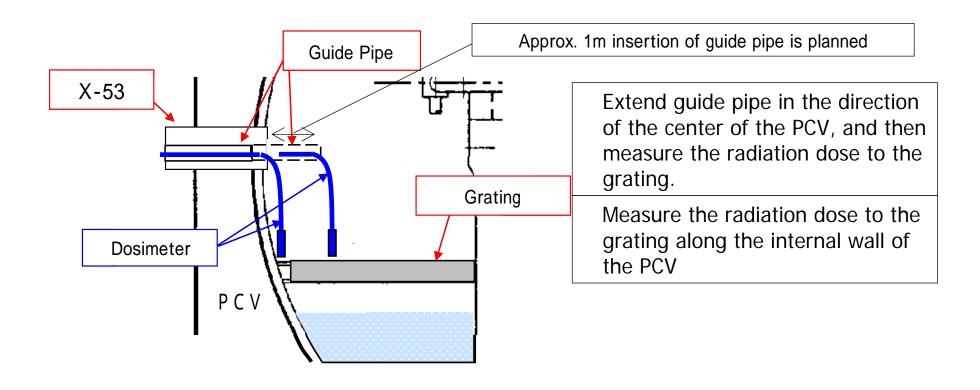
Insert bore scope and thermo couple as deep as possible from the same point of , and then measure the temperature of the accumulated water and take pictures.

Outline of the Insertion of borescope and thermo couple



4. Investigation Plan (Ambient Radiation Dose)

Measurement of the ambient radiation dose inside the PCV is to be conducted by inserting the dosimeter from the penetrating part of the PCV (X-53 penetration, 1FL R/B)



Outline of the insertion of dosimeter



(Reference) Outline of Borescope



Display and Manipulator



The head of borescope

<Specification>

External diameter of the borescope	8.5 mm (external diameter of the head: 12.7 mm)
Length of the borescope	20m
Temperature range	~ 100 (in the air), ~ 30 (under water)
Radiation Resistance	1000Gy

(Reference) Outline of Dosimeter



<Specification>

Ionization chamber

External diameter of the head	7mm (Max. Diameter 13.8 mm)
Measurement range	0 ~ 1000Sv/h

