

# **Investigation Results of the MSIV Room on the First Floor of Unit 2 Reactor Building at Fukushima Daiichi Nuclear Power Station**

**April 16, 2013**

**Tokyo Electric Power Company**



**東京電力**

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# Overview

## ■ Purpose

Gather information useful for the future investigation of the PCV and the consideration of repair methods through measuring the atmosphere dose rate and investigating the condition of the surrounding area of the PCV penetration in the MSIV Room in the Reactor Building by utilizing robots.

## ■ Investigation items

MSIV Room on the first floor of Unit 2 Reactor Building

- Dose rate measurement
- Visual inspection (PCV penetration, floor and ceiling)
- Temperature/humidity measurement
- Dust density measurement

## ■ Workers involved

TEPCO: 12 (5 at the site and 7 at the Main Anti-earthquake Building)

Cooperative company: 6 (at the site)

## ■ Equipment used

Remote-control robot Quince 2: 1

Packbot: 1

## ■ Date and time

Tuesday, April 16

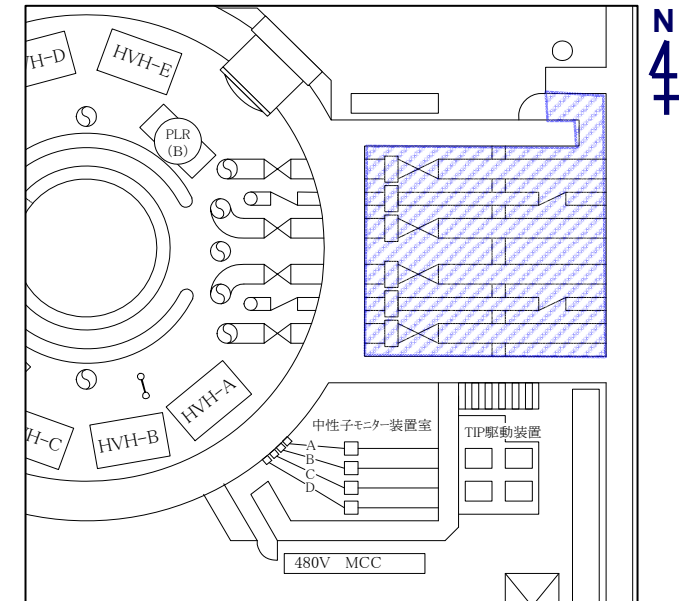
11:13 AM Robots entered the R/B

2:03 PM Robots left the R/B

## ■ Maximum radiation exposure dose

Workers: 0.55mSv (Planned: 7.0mSv)

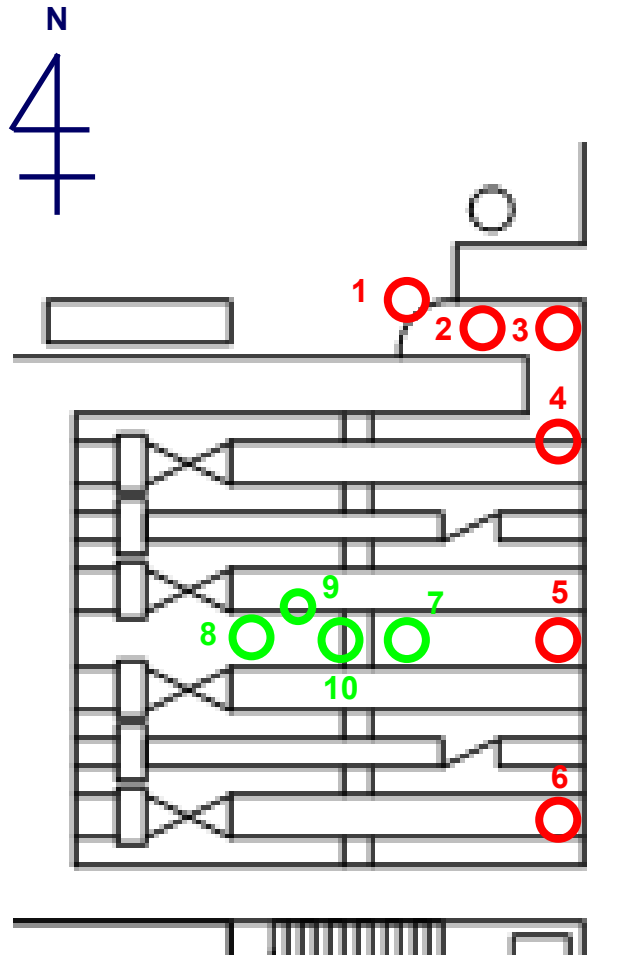
Robots: 5.7mSv (Quince 2) - 12.5mSv (Packbot)



 : Scope of investigation (MSIV Room)

# Atmosphere Dose Rates in the MSIV Room

First floor of Unit 2 Reactor Building



MSIV Room

○ Measured above the floor of the first floor

Height	Dose rate [mSv/h]		Remarks
	0.6m	1.9m	
1	5.5	5.1	
2	4.1	3.7	
3	1.3	1.3	
4	1.8	1.8	
5	2.2	1.8	
6	2.1	1.7	

○ Measured above the grating

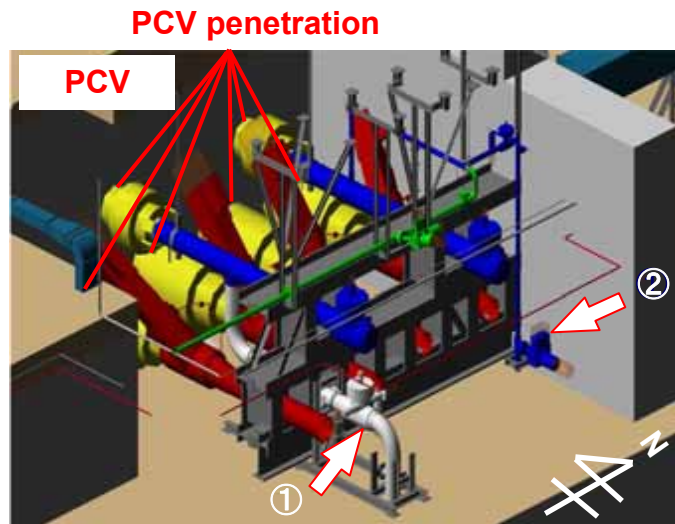
Height	Dose rate [mSv/h]		Remarks
	0.6m		
7	3.7		
8	6.8		7.5 (Height: 1.9m)
9	9.6		
10	9.9		

\*The measurement was done only at 0.6m due to obstacles.

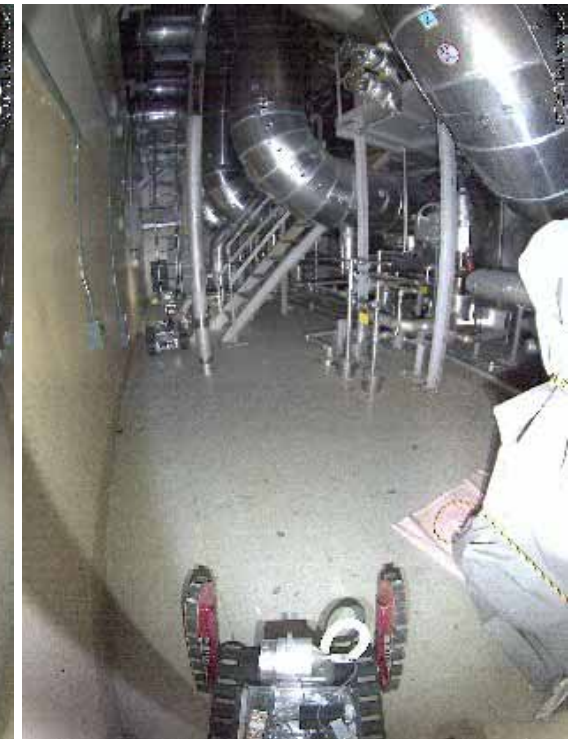
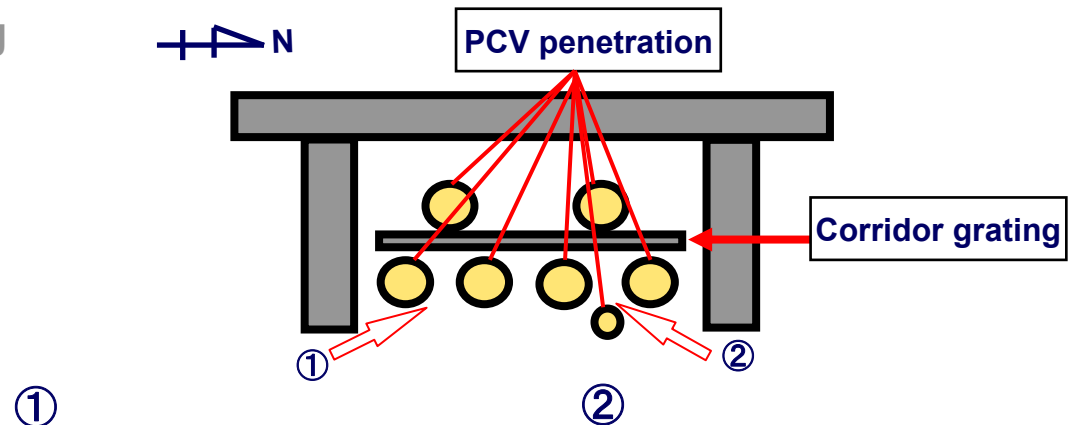
Temperature/humidity inside the MSIV Room: 19°C, 58%

# Results of the MSIV Room Investigation (Full-View)

First floor of Unit 2 Reactor Building



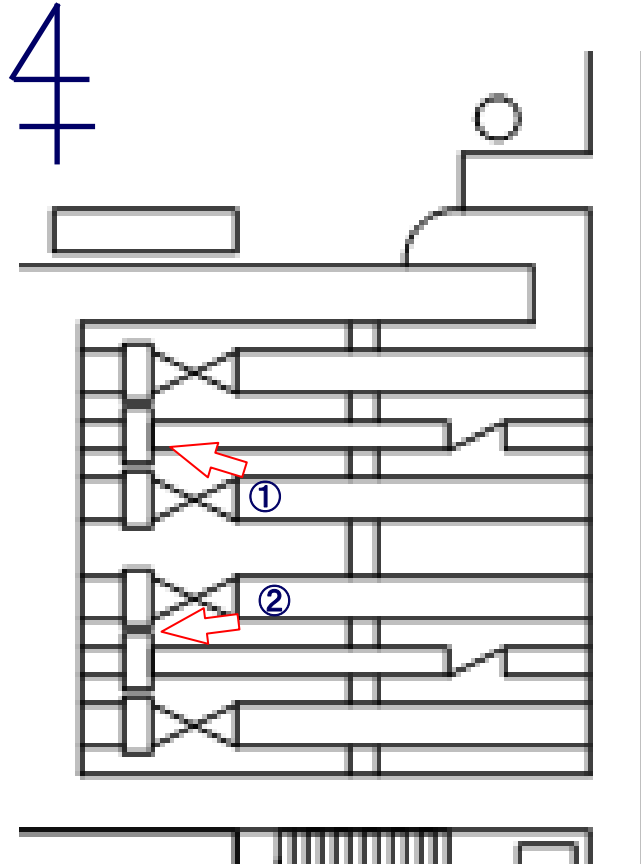
Simulated image of the MSIV Room



# Results of the MSIV Room Investigation (Penetration Areas)

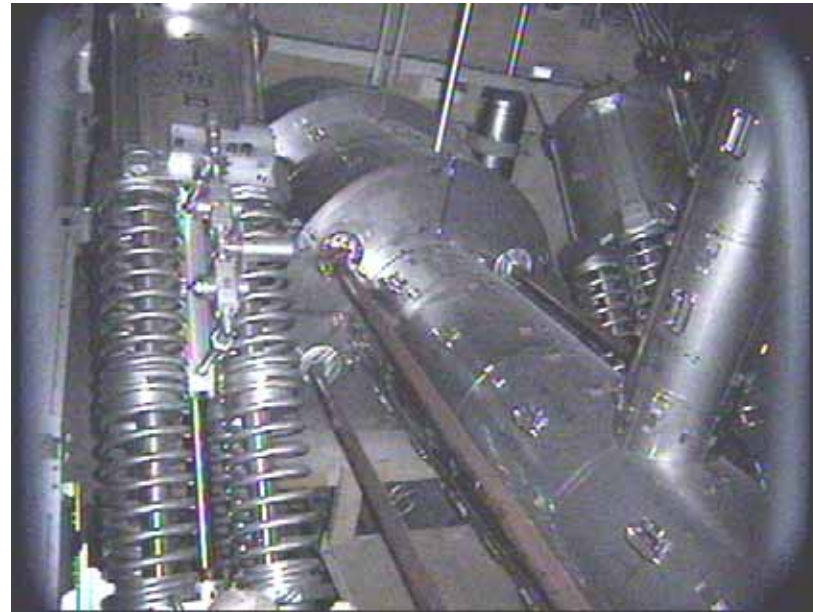
First floor of Unit 2 Reactor Building

N Photos taken from above the grating

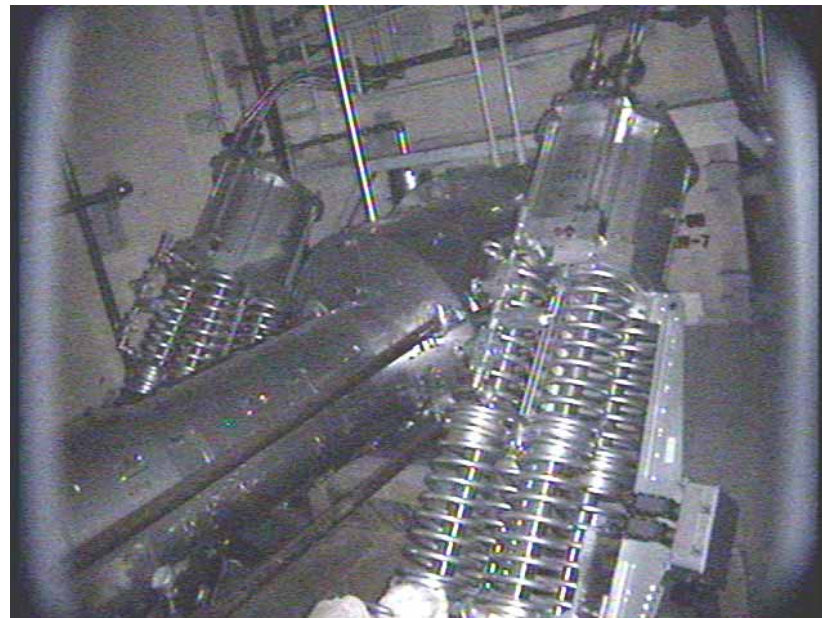


MSIV Room

①



②

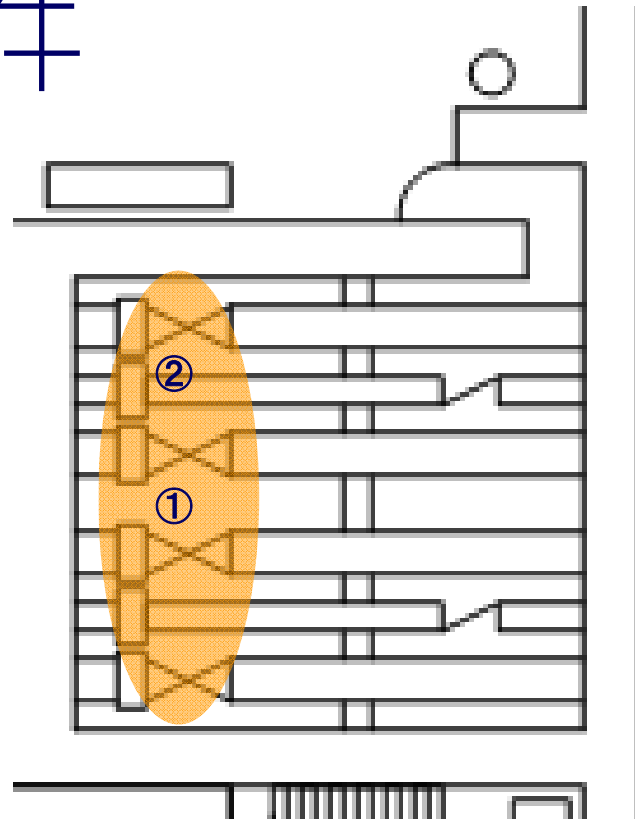


# Results of the MSIV Room Investigation (Ceiling)

First floor of Unit 2 Reactor Building ①



Photos taken from above the grating



MSIV Room



②

