Fukushima Daiichi Nuclear Power Station
Unit 3 Reactor Building Basement
Torus Room Investigation

東京電力

TEPCO

Investigation Outline

Purpose
As water leak investigation and water stop measure implementation are planned for the area from PCV / Reactor Building to the Turbine Building, it is critical to understand the current condition of the Torus Room. A robot will investigate the inside of Torus Room with high radiation dose to obtain inputs to be leveraged for planning the water leak investigation and water stop measures.

Investigation Items
The following will be done in the Torus Room in Unit 3 Reactor Building basement.
-Visual confirmation (Acquire photos and moving images)
-Dose rate measurement
-Collect sound samples in the Torus Room

The investigation was terminated as the cable communication of the survey runner was interrupted. However, visual confirmation and dose rate measurement were done almost as scheduled. Since the survey runner is still in the Torus Room, we have not been able to get the sound equipment back.

Equipment: Remote control robot (Survey runner)

Members involved: 11 TEPCO employees

Investigation date: Wednesday, July 11, 2012
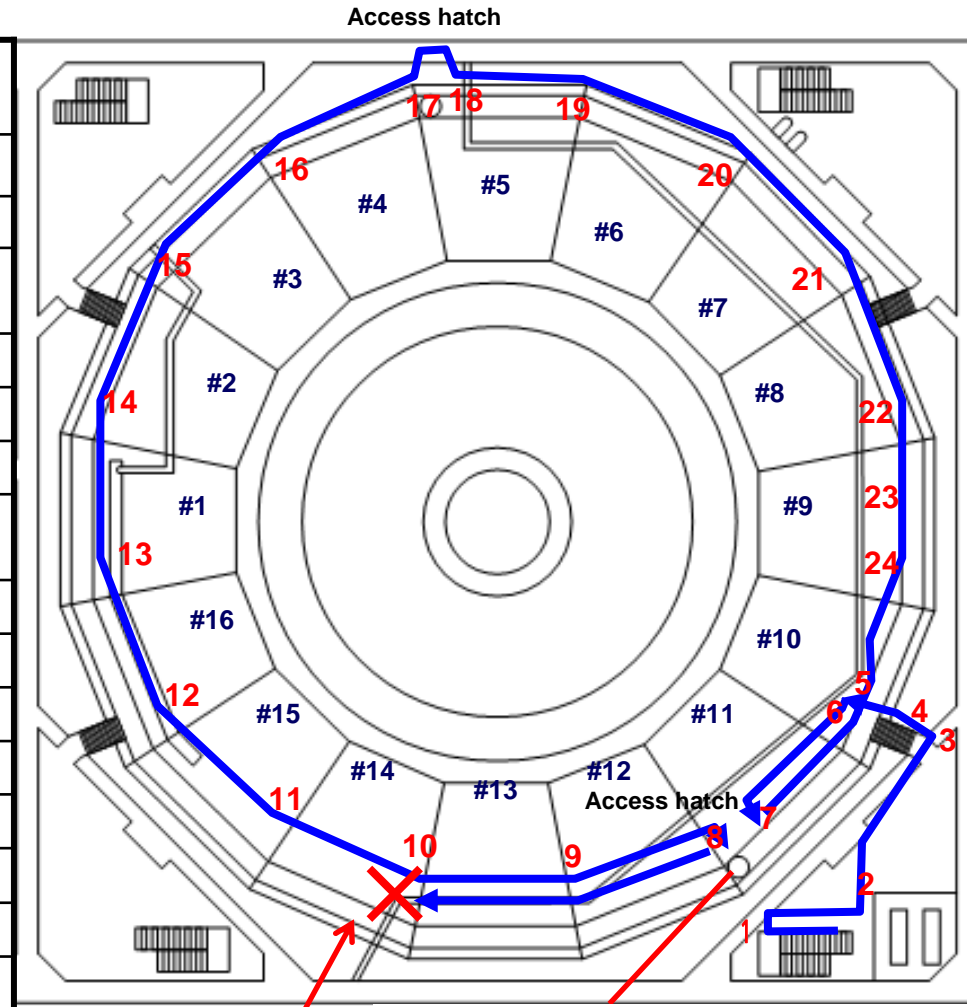11:03 AM: Survey runner entered R/B
2:09 PM: Cable communication of the survey runner interrupted

Planned expose dose

Planned exposure dose [mSv]	Maximum exposure dose [mSv]	Number of people	Assigned roles
2	0.58	5	Robot operation, preparation, carrying the robot inside T/B
8	5.32	6	Carrying the robot through the triangle corner, opening doors

Investigation Result (Dose Rate)

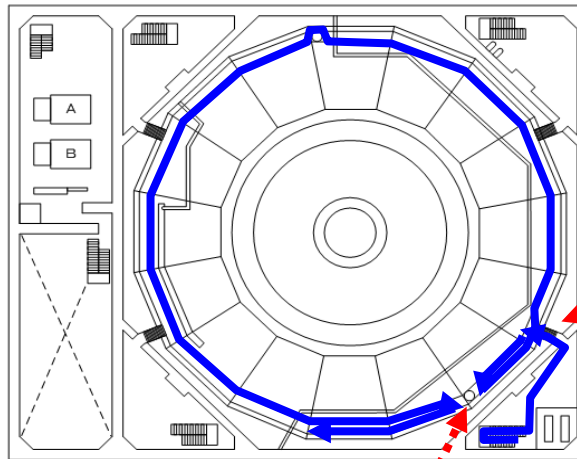| Point	Dose rate [mSv/h]	Remark	Point	Dose rate [mSv/h]	Remark
1	4		16	186	
2	18		17	234	
3	46		18	360	Side of the access hatch
4	100		19	169	
5	190		20	158	
6	173		21	164	
7	154	Side of the access hatch	22	186	
8	125		23	240	
9	176		24	193	
10	230				
11	192				
12	158				
13	176				
14	180				
15	179				

Location where the cable communication of survey runner was interrupted

The robot was unable to go through the side of the access hatch as it was too narrow

Unit 3 R/B Basement

Torus Room entrance

Southeast side manhole

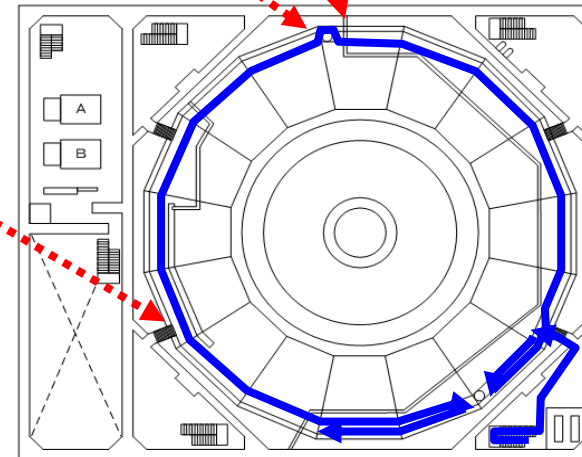**Unit 3 R/B Basement**

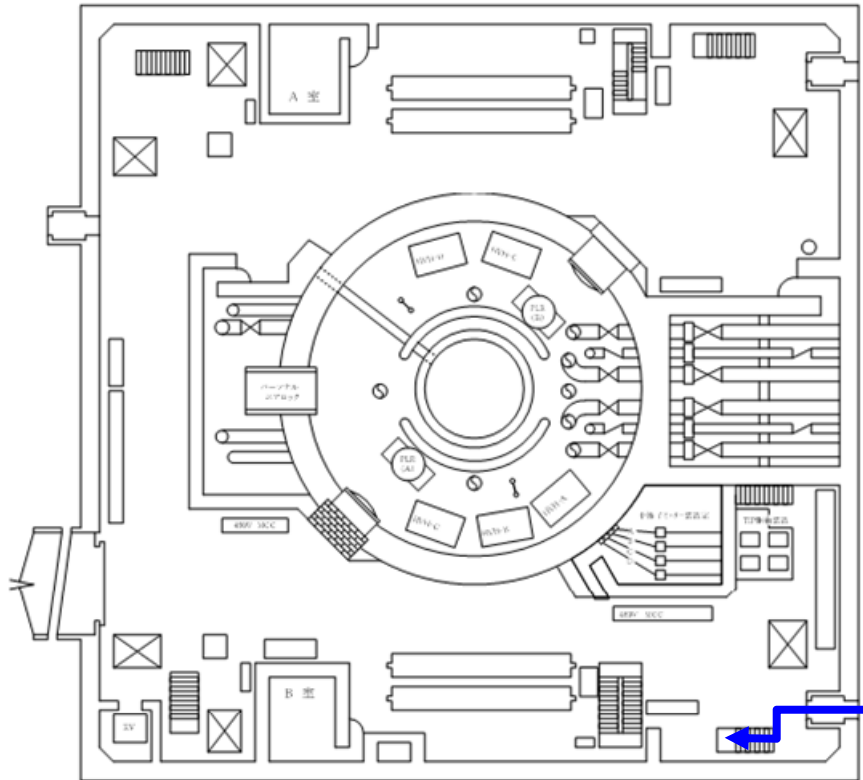**North side manhole**

PCV side

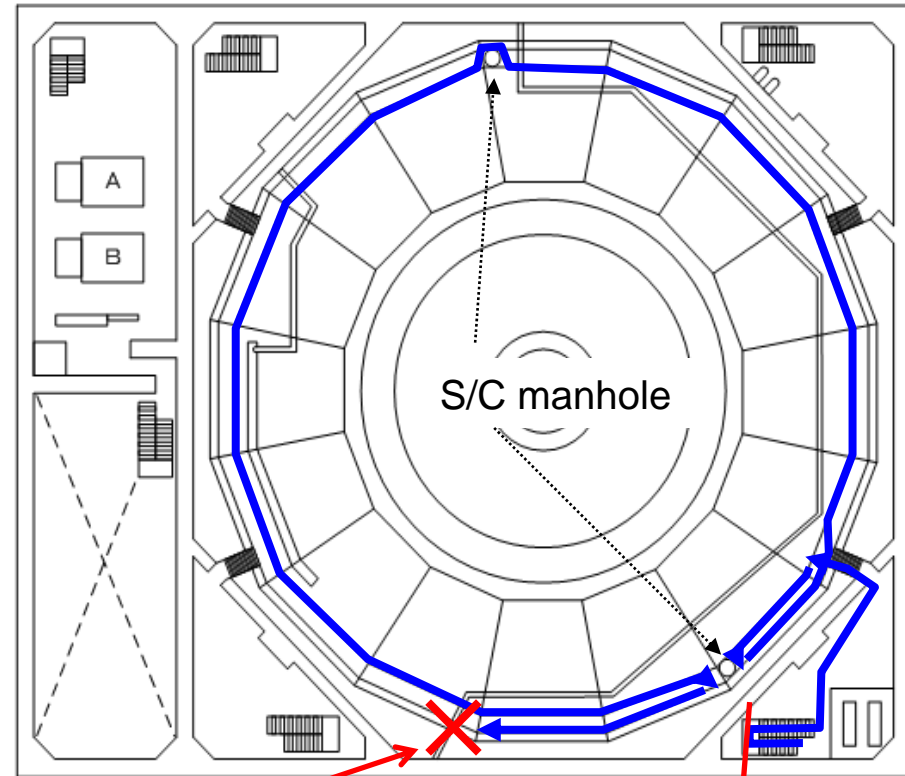**In front of Southwest stairway**

Access Route for the Robot

R/B 1st floor

R/B Basement

S/C manhole

Location where the cable communication of survey runner was interrupted

The robot was unable to go through the side of the access hatch as it was too narrow

——— : Access route

東京電力 TEPCO