<Reference>

Fukushima Daiichi Nuclear Power Station Unit 2 Primary Containment Vessel Internal Investigation Results (Bulletin)

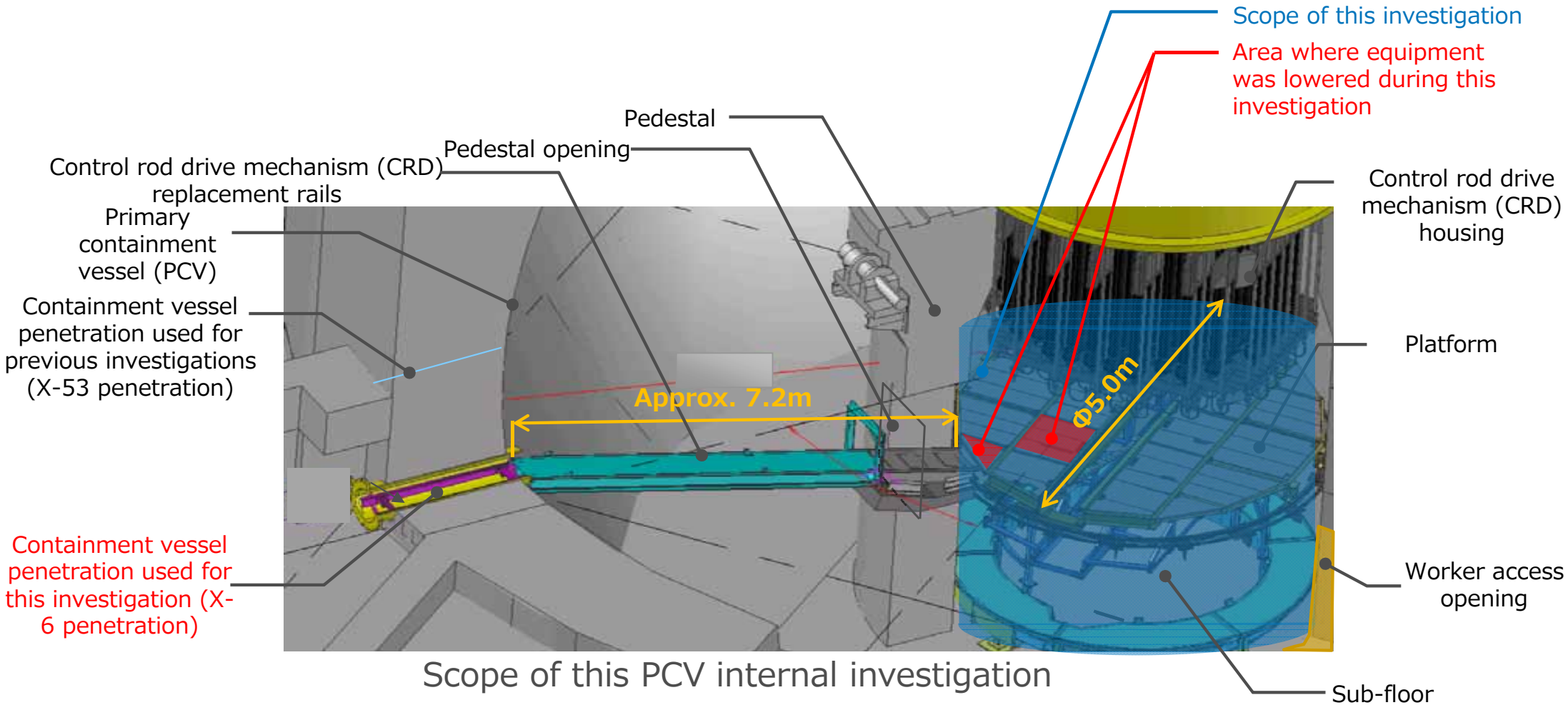
January 19, 2018

TEPCO

Tokyo Electric Power Company Holdings, Inc.

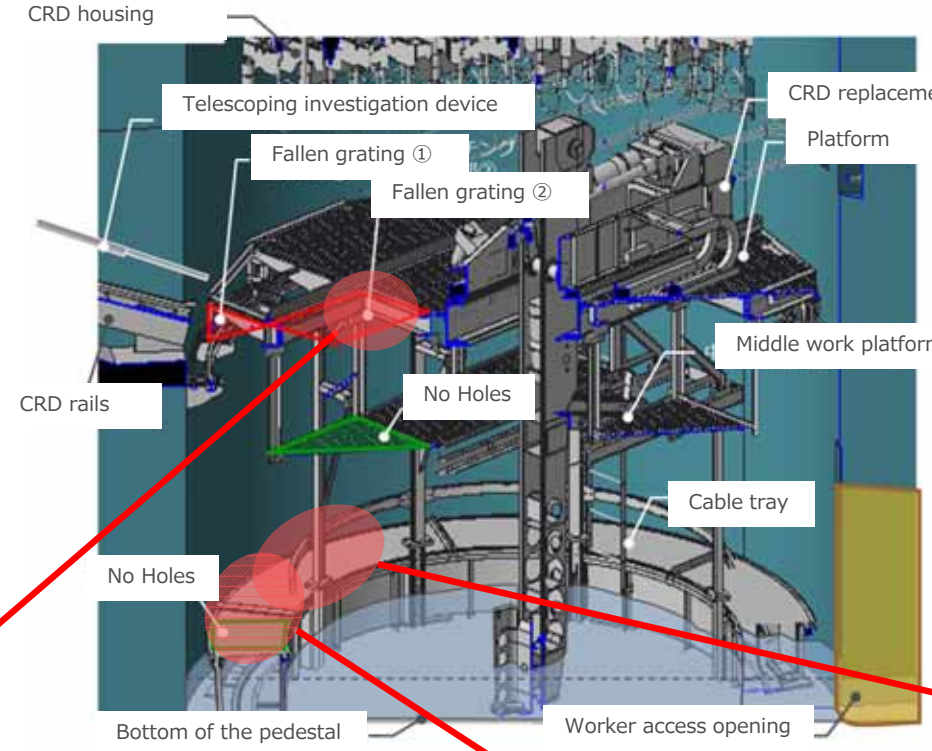
1． Primary containment vessel internal investigation overview

【Investigation Plan】：The area underneath the platform, where fuel debris may exist, was checked.



Scope of this PCV internal investigation

2． Internal investigation results (bulletin) （1/2）

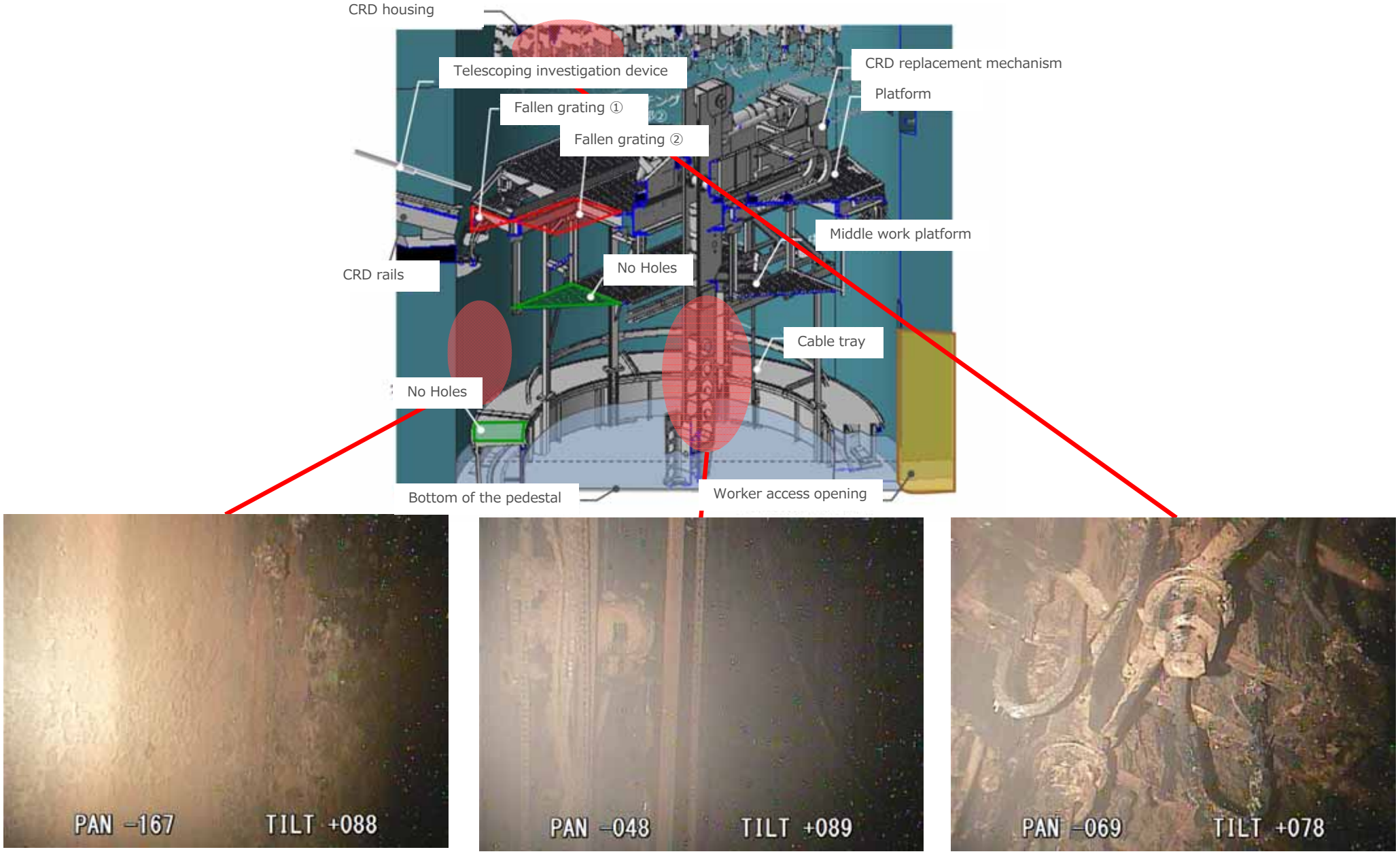


Fuel assembly component

※Investigation position is tentative

Photos provided by: International Research Institute for Nuclear Decommissioning (IRID)

2． Internal investigation results (bulletin) （2/2）



※Investigation position is tentative

Photos provided by: International Research Institute for Nuclear Decommissioning (IRID)

3. Work Conditions

Feed from overhead camera 1
(Lowering the investigation unit)

Feed from overhead camera 2
(Lowering the investigation unit)

Work outside the PCV (In front of X-6 penetration)

Remote operations center

Field command center

Photos provided by: International Research Institute for Nuclear Decommissioning (IRID)

4. Summary

【 Investigation Results Summary 】

- The internal investigation was completed as scheduled.
- The entire bottom of the pedestal was found to be covered with sandy and clay-like deposits.
- Some fuel assembly components have fallen to the bottom of the pedestal and deposits thought to be fuel debris were found in the vicinity of these fallen components.
- The CRD housing supports were found to be in the same condition as was seen during the January~February 2017 investigations.
- The investigation was completed while keeping worker exposure doses under planned limits.
- No significant fluctuations were seen in data from monitoring posts or dust monitors neither prior to, nor after, the investigation.

【Plans going forward】

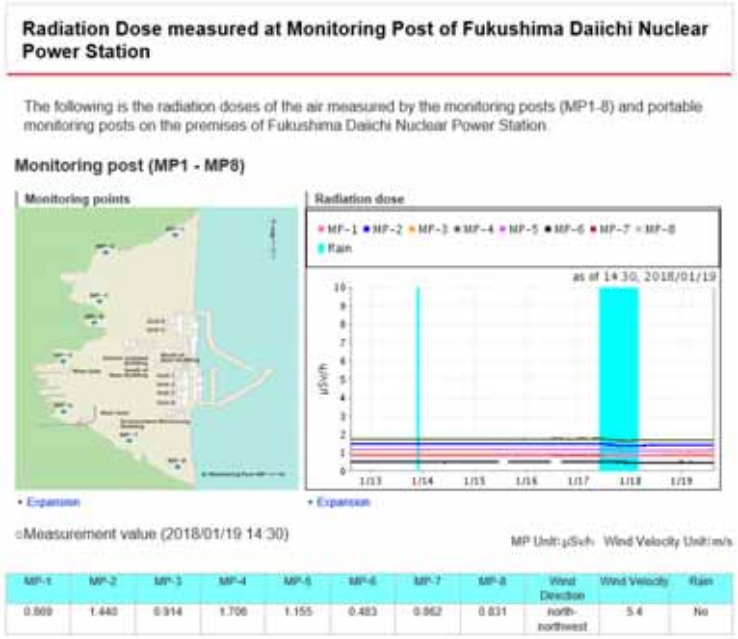
- The photos taken during this investigation will be analyzed and radiation level/temperature data assessed.

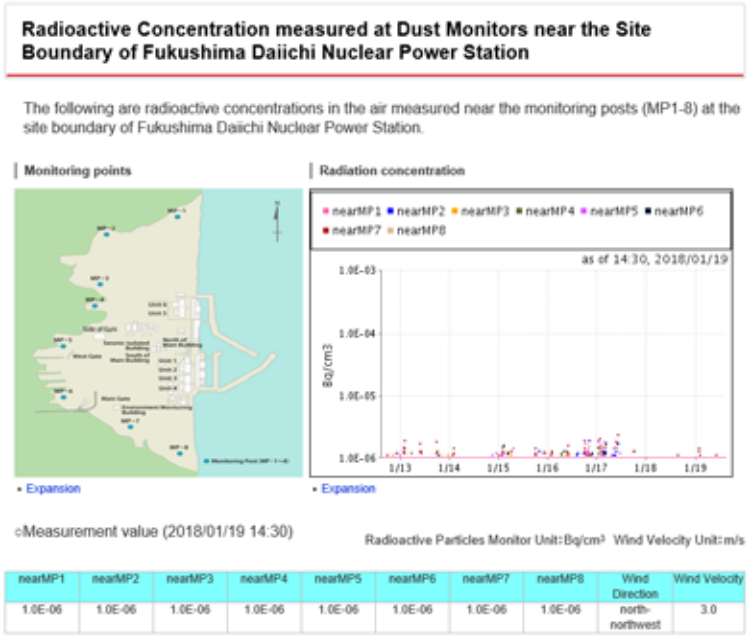
5. Environmental Impact (1/2)

- **There was no impact on the surrounding environment from radiation during internal investigation of the Unit 2 primary containment vessel conducted on January 19.**
- **During the investigation a boundary was constructed to prevent the gases from inside the containment vessel from leaking into the external environment.**
- **No significant fluctuations in data from monitoring posts and dust monitors were seen neither prior to, nor after, the investigation.**
- **Data from monitoring posts and dust monitors near site boundaries can be found on our website.**

URL : http://www.tepco.co.jp/en/nu/fukushima-np/f1/index-e.html
http://www.tepco.co.jp/en/nu/fukushima-np/f1/dustmonitor/index-e.html

(Reference) Website Excerpt





*Radiation levels include contributions from radiation sources other than the inside of the primary containment vessel.

5. Environmental Impact (2/2)

- **During the investigation, plant parameters were continuously monitored and no significant fluctuations were seen in the temperature of the primary containment vessel neither prior to, nor after, the investigation. There were also no changes in the cold shut down status of the reactor.**
- **Primary containment vessel internal temperature data can be viewed on our website.**

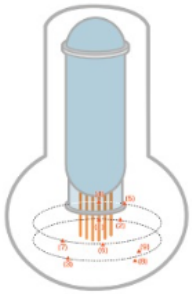
URL : http://www.tepco.co.jp/en/nu/fukushima-np/f1/plantdata/unit2/pcv_index-e.html

(Reference) Website Excerpt

Temperatures measured inside the Unit 2 Primary Containment Vessel at Fukushima Daiichi Nuclear Power Station

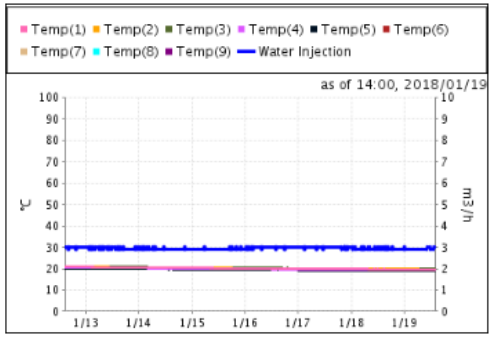
Here are the measurement results of temperatures inside the Unit 2 Primary Containment Vessel at Fukushima Daiichi Nuclear Power Station.

Monitoring points



Expansion

Temperature



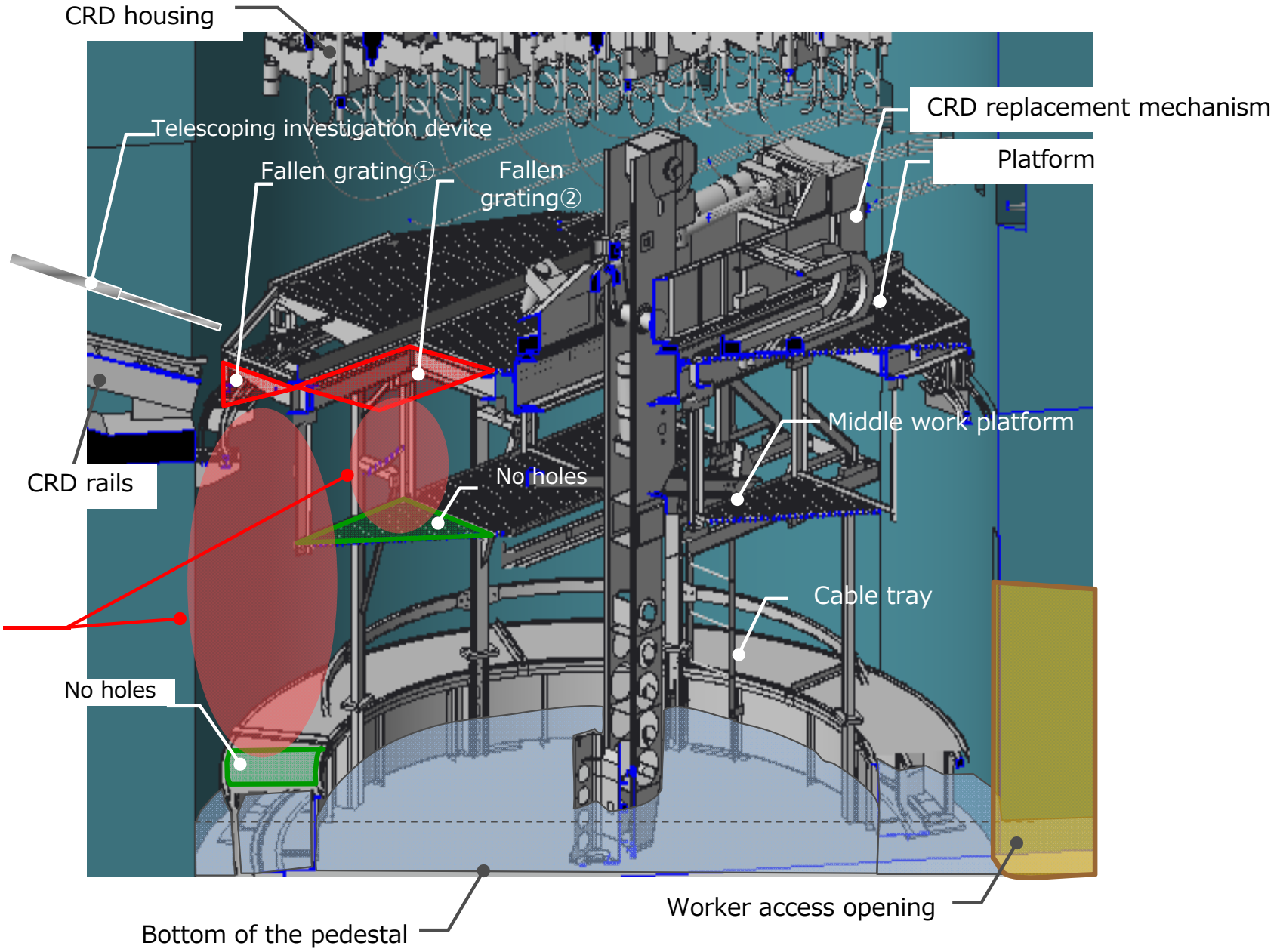
Expansion

○Measurement value (2018/01/19 14:00)

Temperature Unit:℃、Water Injection Unit:m³/h

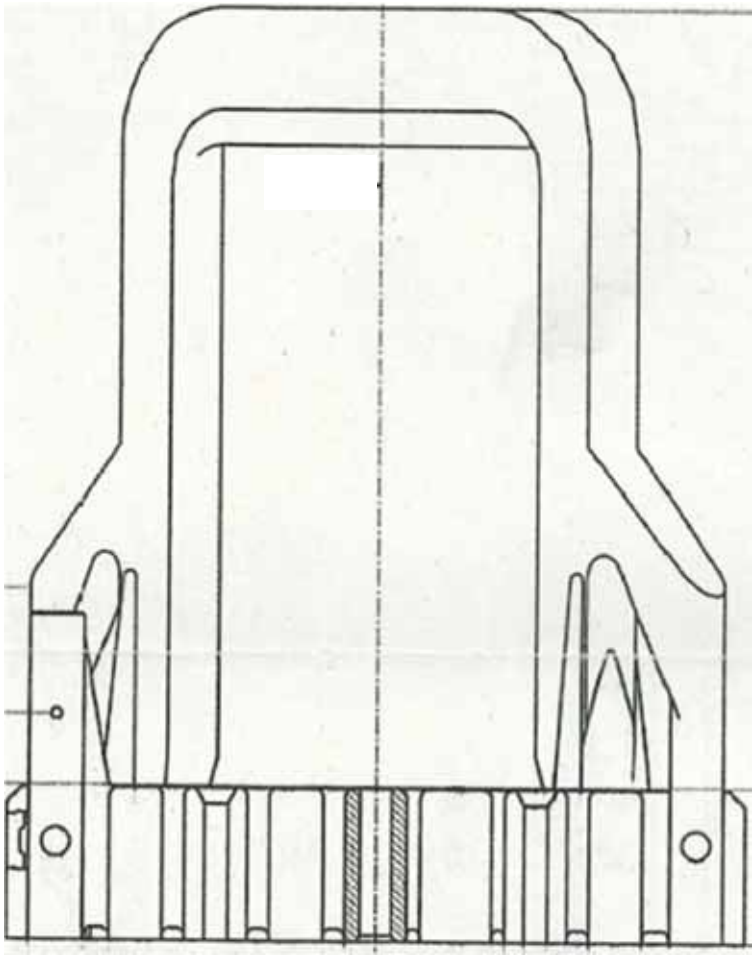
Temp(1)	Temp(2)	Temp(3)	Temp(4)	Temp(5)	Temp(6)	Temp(7)	Temp(8)	Temp(9)	Water Injection
19.7	19.7	19.9	19.4	19.0	19.3	19.2	19.7	19.7	3.0

Reference: PCV Internal investigation location



Area that the investigation unit accessed during this investigation (tentative)

Reference: Fuel assembly component (top tie-plate)



Fuel assembly component (top tie-plate) drawing