

Unit 2 Primary Containment Vessel Internal Investigation

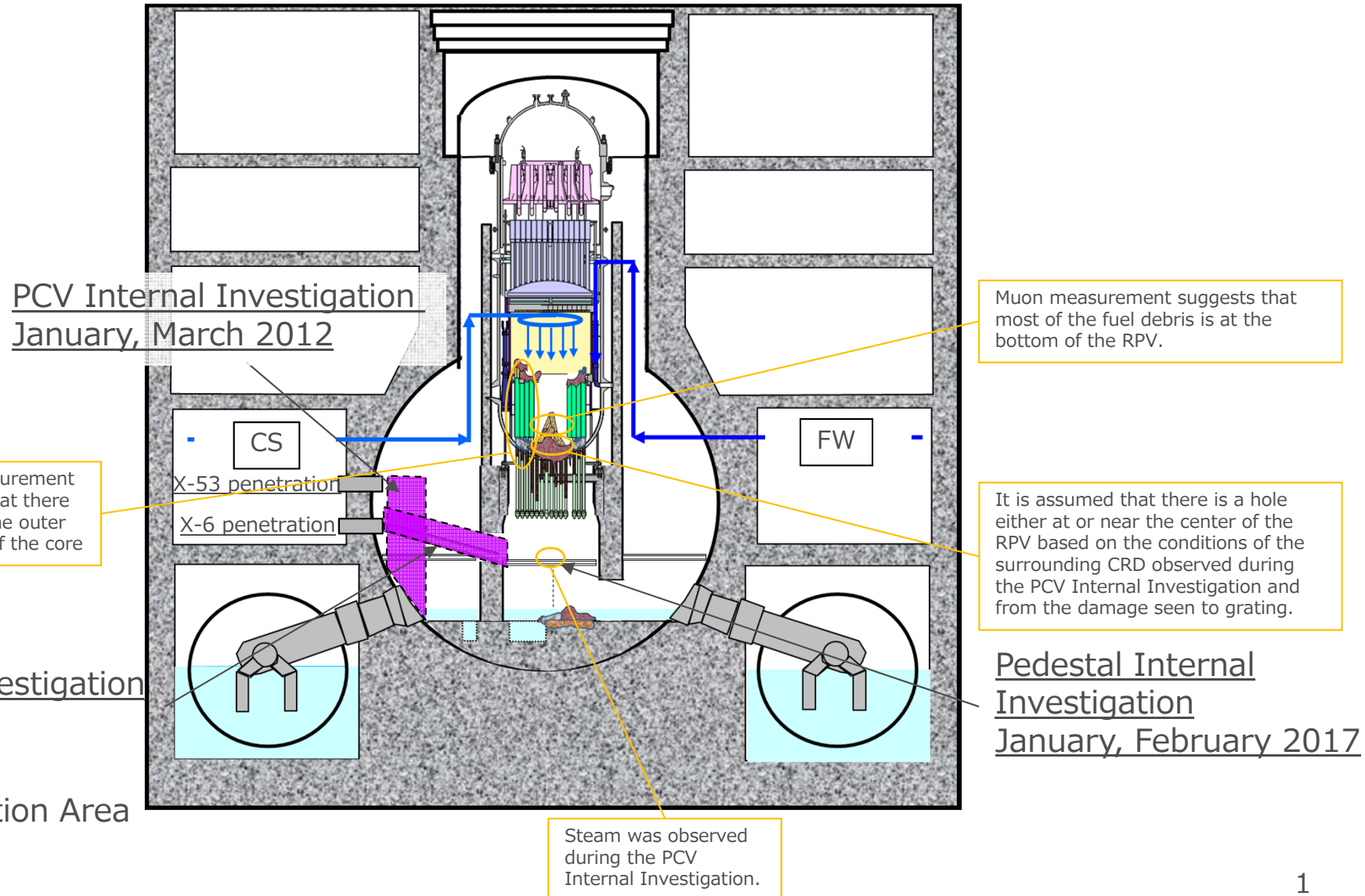
November 30, 2017



Tokyo Electric Power Company Holdings, Inc.

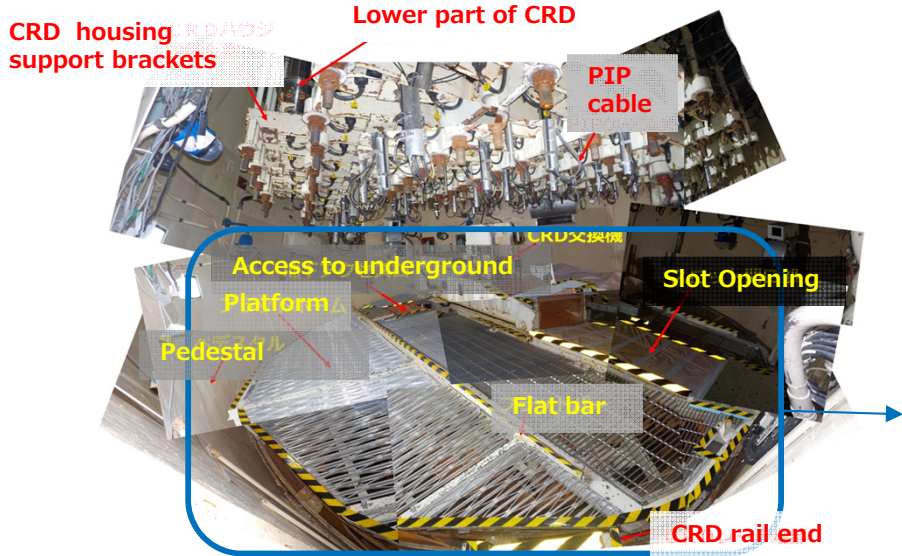
1. Conditions inside the Unit 2 PCV

- According to accident development analysis, it is assumed that part of the melted fuel fell to the plenum at the bottom of the Reactor Pressure Vessel (RPV) or onto the pedestal, with some still remaining in the core.

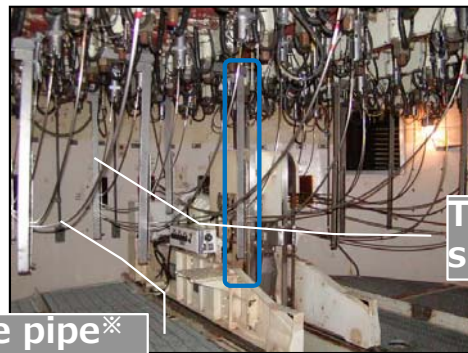


2. PCV Internal Investigation results in Jan. – Feb. 2017

- It was found that a part of grating was missing during the pre-investigation of the inside of the pedestal conducted through the guide pipe during the PCV Internal Investigation from January to February, 2017.

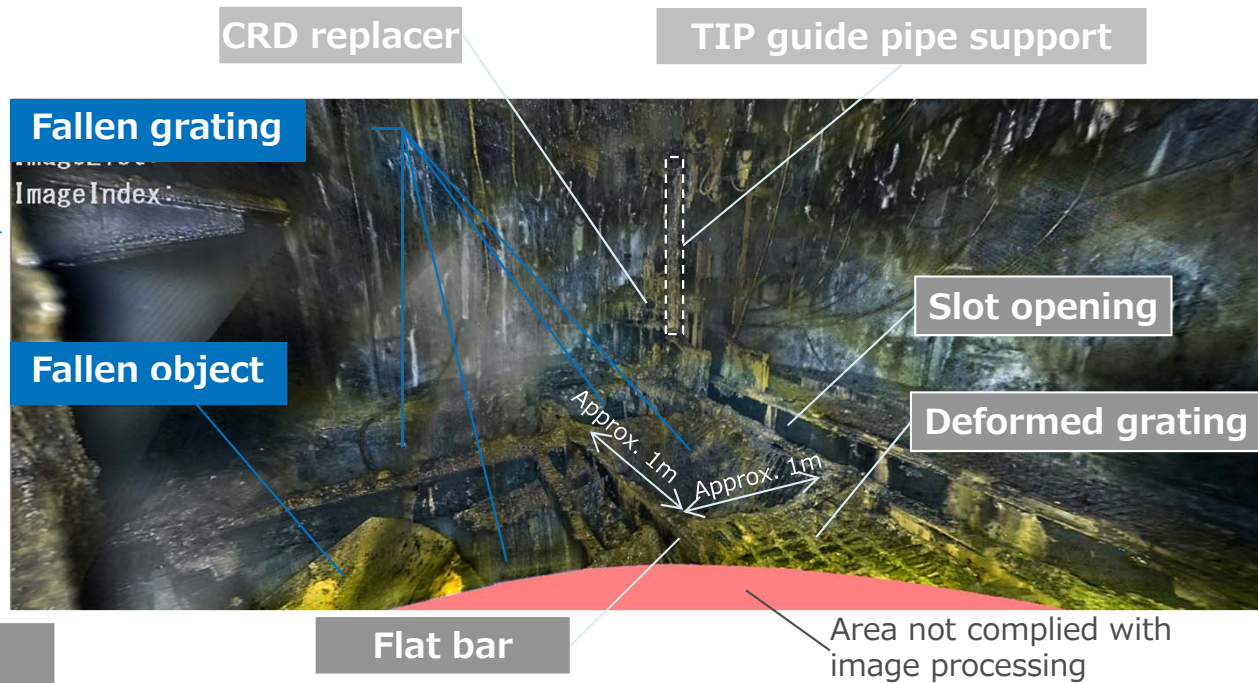


(Reference) Inside Unit 5 pedestal



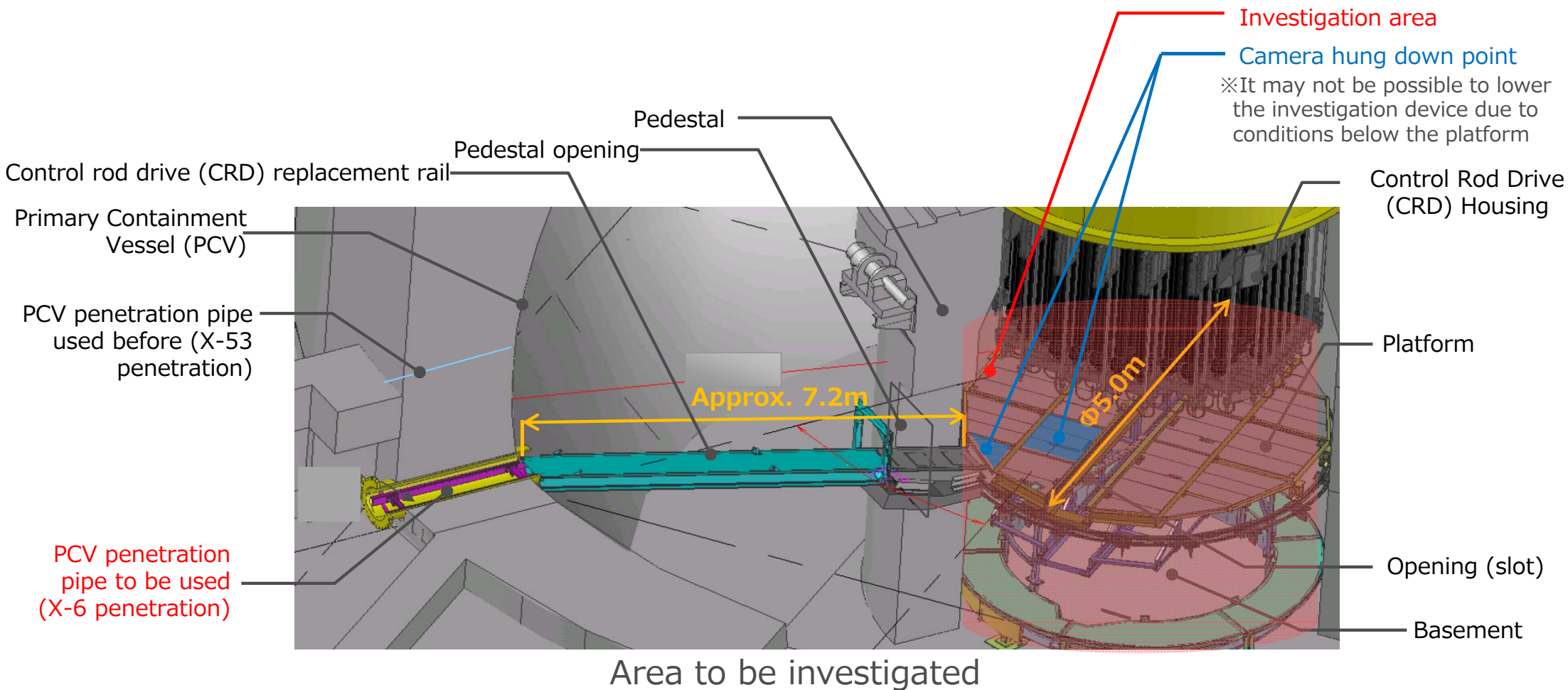
(Reference) Photo taken during periodic inspection inside Unit 2 pedestal

※ The TIP guide pipe and its supports were removed to inspect Unit 5.



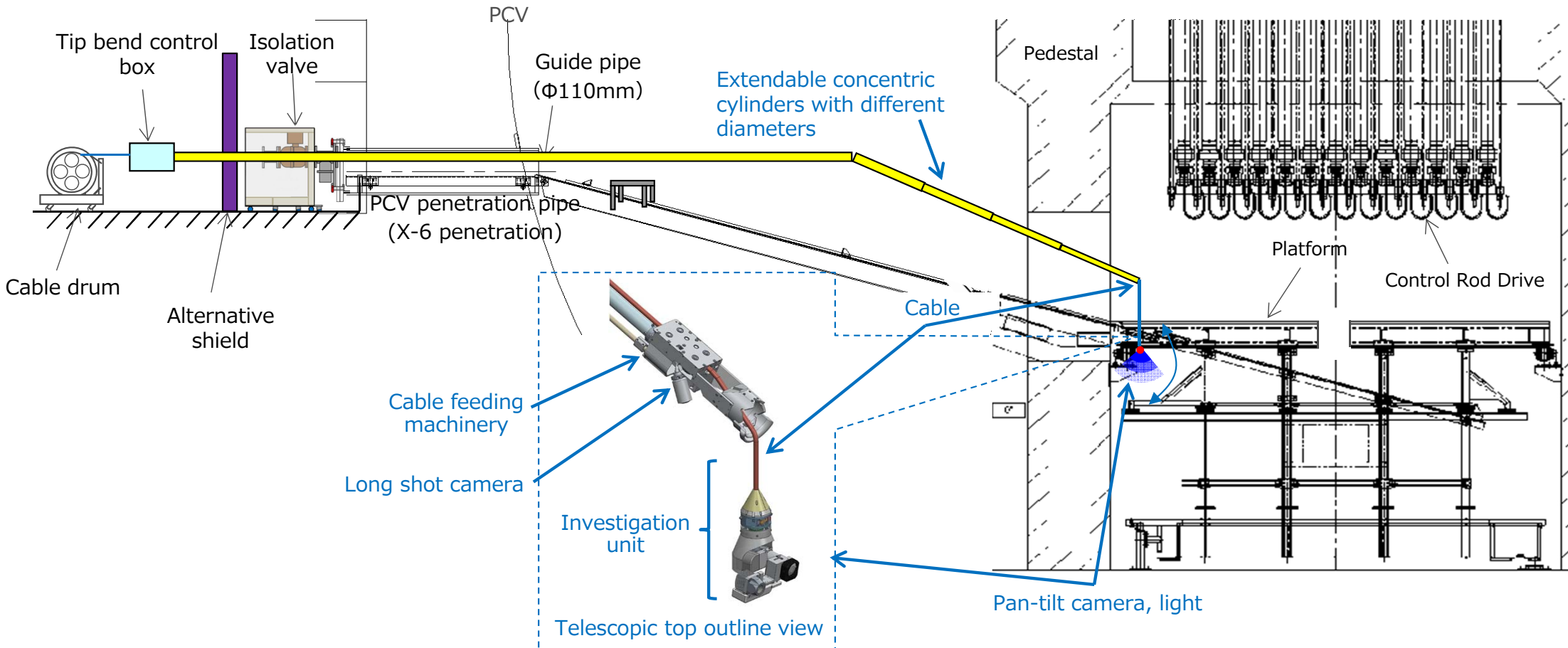
3. Outline of the next PCV Internal Investigation

【Plan】 :Conditions under the platform where fuel debris may exist will be examined.



4. Investigation method (1/2)

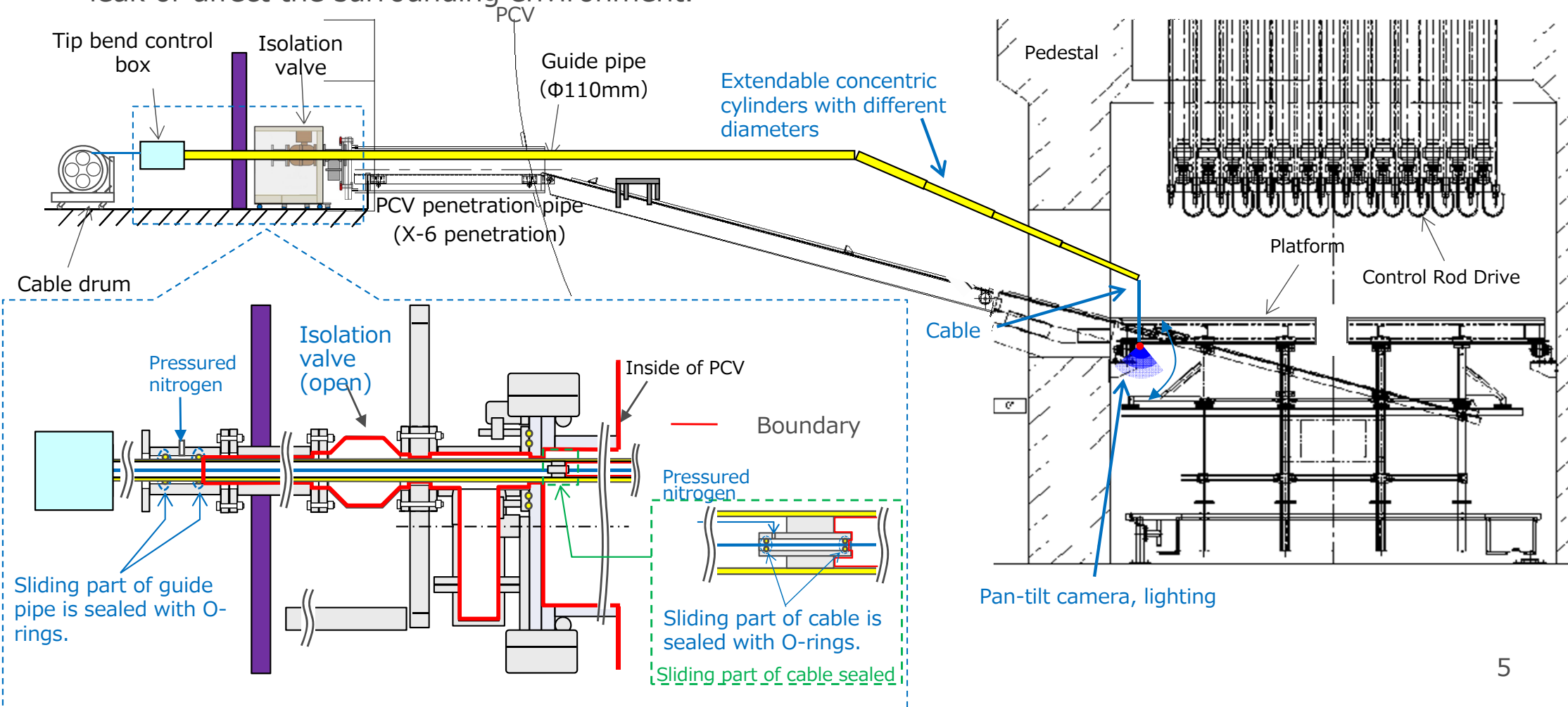
- The telescopic device used in the PCV internal investigation conducted between Jan. to Feb. 2017 will be improved so that it can extend the length of the guide pipe and has a camera-mounted investigation device affixed to the end
- After the investigation device reaches the area above the missing part of the grating inside the pedestal, the camera will be lowered to examine under the platform.
- This improvement will enable the investigation device to reach the end of the guide pipe inside the pedestal, much further than during the investigation conducted in January~February, and allow conditions above the platform, such as the CRD housing, to be reexamined.





Outline of pre-investigation inside the pedestal (Telescopic investigation device)

4. Investigation method (2/2)

- Just like the PCV internal investigation conducted in January~February, a boundary will be formed as shown below by sealing the sliding part of the guide pipe with double O-rings and pressurizing the pipe with nitrogen to prevent gas inside PCV from leaking outside and affecting the surrounding environment during the investigation.
- A similar boundary will be formed for the sliding part of the cable as well.
- Dust concentration will be monitored during the operation to check that gas inside the PCV does not leak or affect the surrounding environment.



5. Process flow plan

Operation	FY2017		
	December	January	February
Advance preparation	Training 	On site preparation 	
PCV Internal Investigation		PCV Internal Investigation 