< Reference document> September 19, 2024 Tokyo Electric Power Company Holdings, Inc. Fukushima Daiichi Decontamination & Decommissioning Engineering Company

On September 17, as a preparation to grasp fuel debris, conditions inside the primary containment vessel was being checked and a functions check of the telescopic device was being performed. As a result, it was detected that footage from the cameras on the end of the telescopic device (1) End jig monitoring camera, 2) Camera on the end of the arm) was not being sent properly to the monitors in the remote operations room for some reason.

We are currently investigating the cause. The current status of this investigation is as follows.



Investigation status so far

- In order to investigate the cause of this incident, we have been inspecting all camera cables, connection terminals, and the outside of the video converters by checking their exterior, signals and measuring insulation resistance.
- Going forward, we will check the video signals coming from the 2 camera on the end of the arm and 1 end jig monitoring camera, by using measuring instruments.



2

Video converters and fiber-optic cables integrity check

- On September 17, cameras ① and ② out of the four cameras attached to the telescopic device were not sending video to the monitors in the remote operations room, and only the color bar test pattern was displayed.
- Camera footage is sent from the video converters inside the reactor building to the remote operations room via a fiber-optic cable (hardwired). As part of the investigation, the four pairs of camera cables inside the control panel in the reactor building were rearranged to different video converters.
- When the connections to the four video converters for each of the cameras were switched (changed connections of ①and③), the monitors to which the problematic cameras were connected to displayed the color bar test pattern (refer to the images below) thereby confirming that there are no problems with signal wiring from the control panel in the reactor building to the remote operations room.



Prior to swapping video converter connections (reference photos)



After swapping video converter connections (reference photos)