Fukushima Daiichi Nuclear Power Station Unit 1 Primary Containment Vessel Internal Investigation (Non-Submerged Area) Implementation Status (Day 2)

- On February 28, small drones were used to perform an investigation of non-submerged area outside the pedestal of the Unit 1 primary containment vessel (hereinafter referred to as, "PCV") (first day of the investigation). During this investigation, we observed the condition of the PCV penetration (X-6 penetration), the opening used to replace the control rod drive mechanism (CRD) and CRD replacement rails, etc. We have yet to see any substantial damage to equipment or structures within the scope that the investigation was conducted.
- During the internal investigation planned on February 29 (second day of the investigation), the snake-like robot was unable to reach the CRD replacement rails as intended due to issues with paying out the cable. As a result, we decided to perform the investigation after implementing countermeasures.
- After investigating the reason why we were not able to pay out the cable for the snake-like robot it was found that when the cable was being paid out, part of it wrapped around the installation bracket for the guide roller inside the sealed container thereby preventing the cable from being paid out to the PCV.
- We have confirmed by March 8 that recurrence prevention measures are effective, and are preparing for the investigation on March 14.

< Announced as of March 11 >

- At 11:04 AM on March 14, we commenced the Unit 1 primary containment vessel internal investigation (the second day) after implementing countermeasures for the snake-like robot cable issues. At 2:44PM, we completed the second day of the two-day investigation.
- Today, we investigated the non-submerged area inside the pedestal using small drones. We observed the status of inner walls of the pedestal, internal structures of the pedestal and fallen control rod drive mechanism (CRD) housing.
- Going forward, we plan to analyze the videos taken by the small drones.

PCV internal investigation of non-submerged area on March 14



Photo 1. Remote operation center

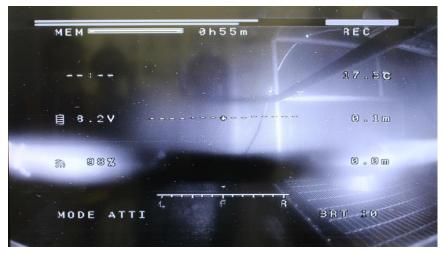


Photo 3. Installment of the small drone (drone #3)



Photo 2. Installment of the snake-like robot (left: front side, right: back side)



Photo 4. Landing the small drone (drone #4)

Timeline of the PCV internal investigation of non-submerged area on March 14 (Day 2)

8:46 AM Commencement of preparations for the PCV internal investigation of non-submerged area (Final airtightness check of sealed container for investigation robots)

9:20 AM Employment of small drones into PCV through X-2 penetration (isolation valve opened)

10:02 AM Employment of snake-like robot into PCV through X-2 penetration

11:04 AM Arrival of snake-like robot near the CRD replacement rails

11:09 AM <u>Commencement of PCV internal investigation of non-submerged area</u> (small drone (third drone) lifts off from install tray)

2:44 PM Completion of PCV internal investigation of non-submerged area (isolation valve closed)

[Reference: Small drone flight time]

Drone #3: Approximately 5 minutes from 11: 20 AM

Drone #4: Approximately 5 minutes from 11:32 AM

[Reference] Timeline of the PCV internal investigation of non-submerged area on February 28 (Day 1)

11:35 AM Commencement of preparations for the PCV internal investigation of non-submerged area (Final airtightness check of sealed container for investigation robots)

12:12 PM Employment of small drones into PCV through X-2 penetration (isolation valve opened)

12:51 PM Employment of snake-like robot into PCV through X-2 penetration

1:18 PM <u>Commencement of PCV internal investigation of non-submerged area</u>
(small drone (first drone) lifts off from install tray)

2:13 PM Completion of PCV internal investigation of non-submerged area (isolation valve closed)

[Reference: Small drone flight time]

First drone: Approximately 5 minutes from 1:22 PM

Second drone: Approximately 5 minutes from 1:34 PM