

Conditions at the Fukushima Daiichi Nuclear Power Station after the Earthquake of March 16 (Update 2)

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

【Earthquake data】

Date/Time: Around 11:36 PM, Thursday, March 16, 2022

Hypocenter: Off the coast of Fukushima Prefecture

Depth: Approx. 60km

Magnitude: 7.3

Seismic intensity in surrounding communities: Futaba Town: 6-strong; Oguma Town: 6-weak

Updated areas
Underlined parts on slides 5, 7, 8-13
Slides 16-19

【 Plant status 】

◆ Seismometers

- Horizontal: 221.3 Gals (Unit 6)
 - Vertical: 202 Gals (Unit 6)
- (Category III)

◆ Observed tsunami height

• It is confirmed that earthquake data is collected with the seismometer installed on the first and fifth floors at Unit 3 reactor building and at 4 locations in the tank area. Earthquake data will be assessed later.

- Approx. 20cm (Time of observation: 1:33 AM, March 17)

◆ Facility status

- Reactor cooling water injection equipment (Units 1~3): No abnormalities
- Monitoring post indicators: No significant fluctuations
- Site border/on-site dust monitor indicators: No significant fluctuations
- On-site dosimeter indicators: No significant fluctuations
- Seawater radiation monitor indicators: No significant fluctuations
- On-site drainage channel monitor indicators (excluding the unloading wharf): No significant fluctuations
- On-site drainage channel monitor indicators (unloading wharf): increase from 60Bq/liter prior to the earthquake to 230Bq/liter. ("High" alarm setting: 1,500Bq/liter)⇒ Decreasing trend seen since around 1:30 AM March 17
- On-site continuous dust monitors : The following fluctuations were confirmed.
 - Unit 2 reactor building: Alarm sounded at 12:09 AM, March 17, and a maximum value of 5.3×10^{-3} Bq/cm³ was indicated at around 1 AM ("High" alarm setting: 1×10^{-3} Bq/cm³)
 - Unit 1/2 west side slope: 1.47×10^{-5} Bq/cm³ (No Alarm; "High" alarm setting: 5×10^{-5} Bq/cm³)
 - Unit 1 ocean side (2.5m foundation): 1.11×10^{-5} Bq/cm³ (No Alarm; "High" alarm setting: 5×10^{-5} Bq/cm³)
 - Unit 3 ocean side (2.5m foundation): 1.55×10^{-5} Bq/cm³ (No Alarm; "High" alarm setting: 5×10^{-5} Bq/cm³)

⇒ Decreasing trend was confirmed after 1:00AM on March 17 in all of the above. The high alarm at Unit 2 reactor building was cleared at 4:39Am on March 17

Sequence of events (1/12)

◆ March 16

11:34 PM Automatic shutdown of the Unit 5 spent fuel pool cooling pump (※ Shutdown at around 11:34 PM in conjunction with earthquake).

⇒ Operation recommenced at 4:08 AM on March 17

11:36 PM Fire alarm in main administration building activates.

11:37 PM Pump that supplies refrigerant for the land-side impermeable wall automatically shuts down after detecting a current surge.

11:50 PM Three fire detectors on the second floor of the Unit 5 turbine building activate.

⇒ 12:05 AM, March 17: Futaba Fire Department notified (General-use phone line)

12:23 AM, March 17: Tomioka Fire Department arrives

1:22 AM, March 17: Fire Department personnel confirm that there is no fire or smoke

2:07 AM, March 17 Tomioka Fire Department determine that fire alarms were false alarms

11:52 PM Nuclear alert issued (EAL earthquake)

11:59 PM Drop in the water level of the Unit 2 SFP skimmer surge tank. Unit 2 spent fuel pool cooling equipment manually shut down. Isolation valve closed. Drop in water level halted.

⇒ After that it was evaluated that limiting condition for operation of 65°C would not be reached.

⇒ Operation recommenced at 7:38 AM

◆ March 17

12:09 AM "High" alarm sounds for continuous dust monitors in the Unit 2 reactor building

12:12 AM Drop in the water level of the Unit 2 SFP skimmer surge tank. Unit 2 spent fuel pool cooling equipment manually shut down. Isolation valve closed. Drop in water level halted.

⇒ Limiting condition for operation of 65°C has not reached

⇒ Operation recommenced at 7:38 AM

12:18 AM Water treatment equipment shut down

⇒ No abnormalities with parameters

1 AM It is confirmed that there are no abnormalities with the contaminated water tank water level indicator.

Around 1 AM Decreasing trend was seen with readings from continuous dust monitors installed in the unit 2 reactor building.

1:05 AM It is confirmed that the water levels in the common pools for Unit 1-4, Unit 5 and Unit 6 have not dropped.

1:19 AM TEPCO employees begin patrols of tank areas on high ground. (class III rounds began)

Sequence of events (2/12)

◆ March 17

2:20 AM Puddles assumed to be caused by sloshing of the Unit 6 spent fuel pool found.

2:35 AM Puddles assumed to be caused by sloshing of the Unit 5 spent fuel pool found .

2:45 AM Drop in the water level (55mm/hour) of the Unit 6 turbine auxiliary cooling system (pure water) surge tank.

2:45 AM Leak the thickness of approximately two pencils was found from the bolt that secures the bottom of the existing desalination equipment ultra filter cleaning water tank. Tank isolated. It has been confirmed that the leak has been contained by the dikes.

⇒ Scope of leak: Approx. 6m x 6m x Depth 1mm. The water that leaked is desalinated freshwater

2:48 AM A small leak of approximately one drop every several minutes found from the hydraulic pump for the filtrated pure water device sludge device. Amount of leak: 50cm x 50cm x 1mm. It has been confirmed that this dripping oil has been stopped by closing a valve.

2:50 AM High ground patrols found that some paint on the dikes of the J5 tank and G6 tank areas has peeled back

⇒ No leaks were found in the aforementioned tank areas.

3 AM Displacement of the strontium-removed water tank (H8-A3) found.

⇒ No leaks were found from the connecting pipes, and no decreases was seen in the water level of the tank.

4:10 AM A leak approximately three pencils in width was found coming from the notch tank that stores rainwater on the west side of water filtration facilities.

Around 4:20 AM Puddles assumed to be caused by sloshing of operation auxiliary common facilities (common pool building) were found.

Around 4:30 AM Leakage of the desalination system (RO-2) sodium sulfite tank was found from the sloshing, and it was confirmed that leakage is contained within the weir. The leakage area was approx. 1m×1m×1mm.

4:31 AM Readings on some water level gauges in ALPS treated water, etc. tanks deviate from the measurable scale of the gauges.

⇒ It is confirmed that there are no abnormalities, such as leaks.

4:55 AM It is confirmed that the air-conditioning isolation valve in Unit 5 reactor building air-conditioning equipment completely closed and the equipment has automatically shut down.

⇒ No significant fluctuations seen in monitor readings.

Sequence of events (3/12)

◆ March 17

5 AM Leak of filtered water and crack found in treated water tank for additionally installed equipment to drain raw water, pure water and sludge that is currently being built.

⇒ This equipment is currently in trial operation and there were no leaks of radioactive substances

5:13 AM Displacement of high-performance ALPS sample tank (A, C) and additionally installed ALPS sampling tank (A, C) found.

⇒ It is confirmed that there are no leaks.

5:48 AM Unit 1 primary containment vessel pressure temporarily increases and then decreases.

⇒ 10:30 PM, March 16 (prior to earthquake): 0.13 kPa

11:37 PM, March 16 (after earthquake): 0.28 kPa

5:37 AM, March 17 (thereafter): 0.00 kPa

5:59 AM It is confirmed that there are no significant fluctuations with the readings of continuous dust monitors in the Unit 1 reactor building.

6:25 AM Exhaust radiation monitor sample pump in the operation auxiliary common facility (common pool building) shuts down.

6:25 AM Water leak found from the downstream side of the Unit 6 turbine auxiliary cooling system seawater pump (A) cooling water inlet valve.

6:29 AM unit 6 turbine auxiliary cooling system seawater pump switched from (A) to (B), and (A) isolated. It is confirmed that the drop in water level in the turbine auxiliary cooling system surge tank has stopped. Pure water is used for coolant and there was no leak of radioactive substances.

6:29 AM It was confirmed that beam-like steel frame had fallen inside the Unit 4 reactor building cover building

7:38 AM Operation of Unit 2 spent fuel pool cooling equipment recommences.

⇒ Field checks implemented to confirm that there are no abnormalities with operation

Confirmed by 8:00 AM 1 reactor building first floor continuous dust monitor reading is 5.7×10^{-4} Bq/cm³ and rising. Unit 2 reactor building first floor continuous dust monitors shows decreasing trend. Other building monitors either shown no significant fluctuation or decreasing trends.

Sequence of events (4/12)

◆ March 17

The following was confirmed by 8:00 a.m.

- It was confirmed that there is no leakage from the accumulated water transfer system, cesium adsorption system, desalination system, Multi-nuclide removal equipment, subdrain purification system, land-side impervious wall system and ground water bypass system.
- It was confirmed that rounds had completed for Units 1-3 CST reactor injection system, common FPC system, spent fuel pool secondary system and power supply system.
- It was confirmed that there is no leakage or other abnormalities at Units 5 and 6 reactor building, turbine building, radwaste building and miscellaneous solid waste incinerator building.

The following was confirmed by 9:00 a.m.

- It was confirmed that six containers stored in temporary storage area "a" had toppled over and its contents had come out. Five of the toppled containers stored used protective clothing, and one container stored scrap iron. Dose of the contents was confirmed to be at the same level as the background.
- Cracks were found on some parts of the on-site road (asphalt). This did not obstruct passage.
- Waterproof coating was found to be peeling from the subdrain collection tank No.1. Tank functions were not affected.
- Tank water gauge indication failure was found on 38 units. 27 of the units were restored with initialization work. The remaining 11 units are planned to be restored using spare parts.
- Water puddle was found on the stair landing (between fourth floor and fifth floor) at Unit 5 reactor building. It was confirmed that water had stopped dripping.
- Ground cracks and subsidence have been found in the Unit 5/6 seawall yard. Environmental improvements are underway in the aforementioned yard in preparation for the construction of facilities to dilute and discharge ALPS treated water, but the cracks and subsidence have had no impact on the shafts currently being constructed.

The following was confirmed by 10:00 a.m.

- It was confirmed that tanks had moved from its position in multiple tank areas and that waterproof coating was peeling inside the weir. Continuously check detailed base numbers. The tank foundation is not fixed and designed to shift its position with seismic shakes.

Sequence of events (5/12)

◆ March 17

The following was confirmed by 10:00 a.m.

- The increased indicated values on the continuous dust monitors at Unit 1 reactor building were confirmed to have dropped to the level before the increase.
- Regarding increase on the shallow draft quay PSF monitor, it was judged that the monitor detector itself had been contaminated since there was no difference between the gross β value of the main stream of the drainage channel and the monitor collection water tank according to sampling results.
- Radioactive liquid leakage alarm went off at Unit 5 reactor building. The field will be checked later.

The following was confirmed by 11:00 a.m.

- Regarding the leakage detector alarm that went off at Unit 5 reactor building, the field was checked and it was found that leakage of a size of about four pencils was flowing into the room from pipe penetrations of the residual heat removal seawater system.
- At six tanks in F area, a drop of water was dripping every 2 seconds from the flange. The dropped water had accumulated in the weir.
- It was confirmed that water is continuously dripping from the receiving pipe of the rainwater mobile receiving tank (A).
- It was confirmed that a drop of water was dripping every minute near the rainwater treatment facility RO membrane unit (A) A-1 inlet pipe. The dropped water had accumulated in the weir. Said facility is currently stopped, and it is planned to cover the area later.
- Restoration procedures for the accumulated water transfer system will start as soon as it is ready.

The following was confirmed by 0:00 p.m.

- The water puddle found on the stair landing at Unit 5 reactor building was checked in the field, and it was found that water puddles exist on the third floor, fourth floor and stair landing between the fourth floor and fifth floor. The water puddle is speculated to have been formed by leaked water from the spent fuel pool flowing into the air conditioning duct near the water surface and dripping from the joint. Currently, water has stopped dripping and has been wiped.

Sequence of events (6/12)

◆ March 17

The following was confirmed by 0:00 p.m.

- A water puddle was found at the bottom of the root of connection tube between H2 area tank C3-D3 tank. Currently, water is not dripping from the root and is contained in the weir.
- It has been confirmed that the following leakages have stopped:
 - Leakage of filtered water from the processing water tank of the raw water filtered water pure water sludge expansion drainage system
 - Leakage of desalinated processing water from the ultra filter cleaning water tank of the existing desalination system
- Regarding tank water gauge indication failure, one unit was restored, counting to 28 out of 38 units having completed restoration. The remaining 10 units are planned to be restored using spare parts.
- Subsidence has been found in the road leading from the Unit 5/6 gate to the ocean side area that is 2.5m above sea level. The subsidence has rendered that part of the road impassable.

The following was confirmed by 1:30 p.m.

- Class III rounds were completed (0:35 p.m.). Measures will be implemented for water leaks and other defects found in the rounds. The status of field equipment will continue to be closely observed in regular rounds.
- All accumulated water transfer pumps of the accumulated water transfer system were started up, and it was confirmed that that integrity is ensured after startup.
- At six tanks in F tank area, areas where water was dripping were covered. (11 areas)

The following was confirmed by 2:30 p.m.

- During regular operator rounds, it was found that water was flowing in from the following pipe penetrations on the first floor of Unit 3 radwaste building. Water that flowed in is contained in the weir.
 - Inlet pipe penetration of spent fuel pool equipment primary system filter demineralizer (B) (size of one pencil)
 - Outlet pipe penetration of same system (5-6 drops every second)

Sequence of events (7/12)

◆ March 17

The following was confirmed by 2:30 p.m.

- The water puddle at the root of the C3-D3 tank connection tube in the H2 area weir was analyzed and determined to be rainwater.
- Water that spilled over due to the Unit 5 spent fuel pool shaking was wiped.
- Fuel pool water that spilled over due to the fuel pool shaking was wiped on the operation floor of Unit 6 reactor building.
- Inspection results for equipment in the port are as follows:
 - Cracks were found on facings in the Units 1-4 revetment area and Unit 5&6 revetment area
 - Mega-float north-side revetment blocks were found to be shifted
 - Abnormalities have not been found for other revetment equipment
- Regarding containers where damage was found before the earthquake in temporary storage area (f), it was found that the damage expanded due to this earthquake. The containers contain used protective clothing, and it was confirmed that the dose of the contents was at the same level as the background.
- It was found that a part of the roof was damaged in the temporary storage area (N)
- Asphalt and ground subsidence have been found in the road leading from the Unit 5/6 gate to the ocean side area that is 2.5m above sea level. This part of the road is currently impassable by vehicles so emergency repairs are to be made.
- Subsidence and cracks have been found in the asphalt throughout the entire new port yard, and subsidence of the entire seawall, and displacement, etc. of seawall blocks has been found. Vehicles cannot currently access the area so emergency repairs are to be made.

Sequence of events (8/12)

◆ March 17

The following was confirmed by 4:00 PM

- A thorough examination of the contents of six containers in temporary storage area A that were toppled has found that four containers were filled with used protective clothing, and two containers were filled with metal scrap. The toppled containers have been set upright.
- Analysis of the water leaking from the residual heat removal seawater system piping penetration in the Unit 5 reactor building has revealed that it is water that has accumulated in the Unit 5 turbine building, so the water is being transferred back to the turbine building using portable pumps.
- An analysis of the water leaking from the notch tank being used to store rainwater on the west side of filtration equipment has determined that the water is indeed rainwater.
- Land-side impermeable wall facilities that automatically shut down have been restarted.
- A thorough examination of temporary storage area (N) has revealed no roof damage.

The following was confirmed by 6:30 PM

- A thorough inspection of temporary storage area B following zone III patrols found that several containers in storage had been toppled and the contents had fallen out. Several containers were also found to be leaning over. Radiation measurements of the contents found that radiation levels were consistent with background radiation. Repairs will be made as soon as preparations are completed.
- Subdrain, etc. purification equipment has been restarted.
- Water that overflowed from the fuel pool in common auxiliary operation facilities (common pool building) due to sloshing has been wiped clean.

7:15 PM Patrols conducted after the earthquake that corresponded to an event necessitating alert status (earthquake with a seismic intensity of 6-weak or larger in the siting community) have determined that the equipment troubles that were found will not have an impact on power station operation. Therefore, the alert has been withdrawn and the station has returned to normal monitoring status.

Sequence of events (9/12)

◆ March 17

The following was confirmed by 8:30 PM

- An inspection of the filtration and desalination equipment (B) room conducted after water was found leaking from the Unit 3 waste treatment facility building 1st floor piping penetration, found puddles inside the room. It has been determined that the water leaking into the skimmer surge tank came from this piping and was caused by sloshing of the fuel pool.
- Emergency repairs to stop the leak from the residual heat removal seawater system piping penetration in the Unit 5 reactor building has reduced the leak from the thickness of approximately four fingers to approximately one drop every three seconds.

The following was confirmed by 9:30 PM

- Repairs on 10 water level gauges to fix tank water level gauge indicator malfunctions has been completed, and all 38 water level gauges have been repaired. Indicators on all water level gauges that have been repaired are normal.

◆ March 18

The following was confirmed by 12 PM

- An operations check of the ceiling crane (currently undergoing inspection) in the common auxiliary operations building cask unloading/loading area found that the ceiling crane does not run back and forth, in addition to the following.

A visual inspection has found two cracks in the gear coupling covers for the running wheels.

The crane can move sideways and the hook can be winched up and down.

A thorough inspection will be performed to check for nonconformances with the running drive mechanism and electrical/control systems

It has been confirmed that there are no problems with common pool fuel cooling

Sequence of events (10/12)

◆ March 18

The following was confirmed by 1:30 PM

- The leak inside the dikes caused by sloshing of the desalination equipment (RO-2) sulfurous acid soda tank has been wiped clean and it has been confirmed that there are no abnormalities.
- The dripping from the receiving pipe for the mobile rainwater receiving tank (A) has stopped after wiping up the water inside the pipe. Operation has not been hindered because system (B) remained operational.

The following was confirmed by 4:30 PM

- An inspection of all of the mid/low concentration tanks used to store water before and after treatment with multi-nuclide removal equipment has been completed and whereas displacement of 160 tanks was found, no leaks were discovered. The aforementioned tanks are not secured to the foundation and designed to move [in conjunction with seismic motion].
- The containers in temporary storage area B that were found to be toppled have been set upright.
- The exhaust radiation monitor sample pump in the common auxiliary operations facility (common pool building) that shutdown has been restarted and there are no abnormalities.

◆ March 19

The following was confirmed by 2 PM

- The one-drip per minute leak that was found near the rainwater treatment equipment RO membrane unit (A) A-1 inlet pipe has stopped. The location at the source of the drip has been covered.
- The leak from the Unit 3 waste treatment facility building 1st floor piping penetration has stopped. The leaked water has been wiped up.

Sequence of events (11/12)

◆ March 20

The following was confirmed by 3 PM

- At around 7:22 AM a contractor discovered that there was a leak of water from the connection pipe to subdrain accumulated water tank No.7. The following conditions were found:

Location (equipment name): Subdrain accumulated water tank No. 7

Location of leak: Connection pipe

Scope of leak: 30mm deep within dike

Measures to prevent spread of the leak: Subdrain relay tank No.3 transfer pump that was transferring water to subdrain accumulated water tank No.6 has been shut down.

Leak conditions: The leak has been reduced to a drip from the pipe insulation (one drop every five seconds).

The dripping water has been covered. There have been no abnormal fluctuations in the water levels of subdrain accumulated water tanks No.1~7.

Impact on the external environment: The leaking water has been contained by the dikes (height: 200mm).

The leak is being continually monitored.

- Tank area patrols conducted today have found that the level of rainwater inside the tank area E dikes has fallen from 6cm yesterday to 3cm. Signs of a past leak have been found near the location where the water level is measured, but there is no leak at current time. Going forward, we shall continue to look for changes in the level of rainwater in the dikes and also make repairs to the location where the signs of a past leak were discovered as soon as preparations are completed. We have confirmed that there are no changes in the water levels of tanks in the tank area E, and that there has been no decrease in the level of rainwater in the dikes of the tank areas other than tank area E. Patrols and monitoring conducted in conjunction with emergency warnings have found no abnormalities with the transfer of accumulated water in buildings, such as leaks.

Sequence of events (12/12)

◆ March 21

The following was confirmed by 5 PM

- The level of rainwater inside the tank area E dikes has fallen from 3cm yesterday to approximately 1cm. Repairs to the location where the signs of a past leak were discovered are underway. No further leaks have been found. We will continue to monitor changes in the level of rainwater in dikes.
- A tritium analysis of water inside the dikes that leaked from the connection pipe to subdrain accumulated water tank No.7 on March 20 found tritium levels to be below detectable limits (77Bq/liter), and at 12:15 PM the water was deemed to be rainwater.
- At 11:39 AM, when subdrain pit No.23 on the west side of the Unit 2 turbine building was sampled, an oil-like substance was found in the sampling container. An oil analysis of the aforementioned subdrain pit detected 9.8mg/liter of oil. Furthermore, water is drained from the subdrain sample tank after performing an analysis and confirming that there are no abnormalities, and the results of oil analysis from recent draining have been below detectable limits (detectable limit: 0.3mg/liter). The pumping up of water from subdrain pit No.23, pits No. 24~27, and relay 1 tank system has been stopped. An investigation into the presence and cause of oil in the pits around subdrain pit No.23 shall be conducted going forward. Conditions are as follows:
 - An oil analysis of relay tank 1 found levels to be below detectable limits U (0.3mg/L)
 - Therefore, the pumping up of water from relay tank 1 system, excluding pits No.23~27, was recommenced at 2:36 PM.
- At around 11:02 AM, a contractor noticed that a transfer pipe leak detector had activated on the west side of the existing multi-nuclide removal equipment building. Conditions are as follows:
 - Time of discovery: Around 11:02 AM
 - Location: West side of the existing multi-nuclide removal equipment building. A visual inspection found no leaks.

Conditions thereafter are as follows:

 - Measurements taken around the RO concentrated water transfer pipe were 450CPM, while measurements taken around the detector were 750CPM. As a result, it is difficult to determine whether the water is rainwater or condensation. No leaks from the detector have been found but it was covered just to be safe.
 - A thorough investigation will be conducted as soon as operations have been completed.

Situation after the earthquake

Falling of steel auxiliary member inside the Unit 4 reactor building cover building

Occurrence (confirmed time): Around 6:29 a.m. on March 17

Description: TEPCO employees found a steel auxiliary member used for exterior wall installation had fallen. It is speculated that the member had fallen due to bolts at the joint rupturing. No significant corrosion was found on the bolts.



Specifications of the beam-like steel frame
Length approx. 5.6m width approx. 25cm height approx. 10cm,
thickness approx. 10-13mm, weight approx. 200kg



Bolts at the joint ruptured



Situation after the earthquake

State of containers



Situation after the earthquake

■ Seawall facilities

Time (of checks): 9 AM~around 2:30 PM, March 17

Overview: Seawall facility inspection results

① Unit 5/6 seawall yard

Ground cracks and subsidence have been found in the Unit 5/6 seawall yard. Environmental improvements are underway in the aforementioned yard in preparation for the construction of facilities to dilute and discharge ALPS treated water, but the cracks and subsidence have had no impact on the shafts currently being constructed.

② Unit 5 south side ramp

Subsidence has been found in the road leading from the Unit 5/6 gate to the ocean side area that is 2.5m above sea level. The subsidence has rendered that part of the road impassable vehicles so emergency repairs are to be made.

③ New port yard

Subsidence and cracks have been found in the asphalt throughout the entire new port yard, and subsidence of the entire seawall, and the displacement, etc. of seawall blocks has been found. Vehicles cannot currently access the area so emergency repairs are to be made.

Situation after the earthquake

Photos of current conditions near the seawall

① Unit 5/6 seawall yard

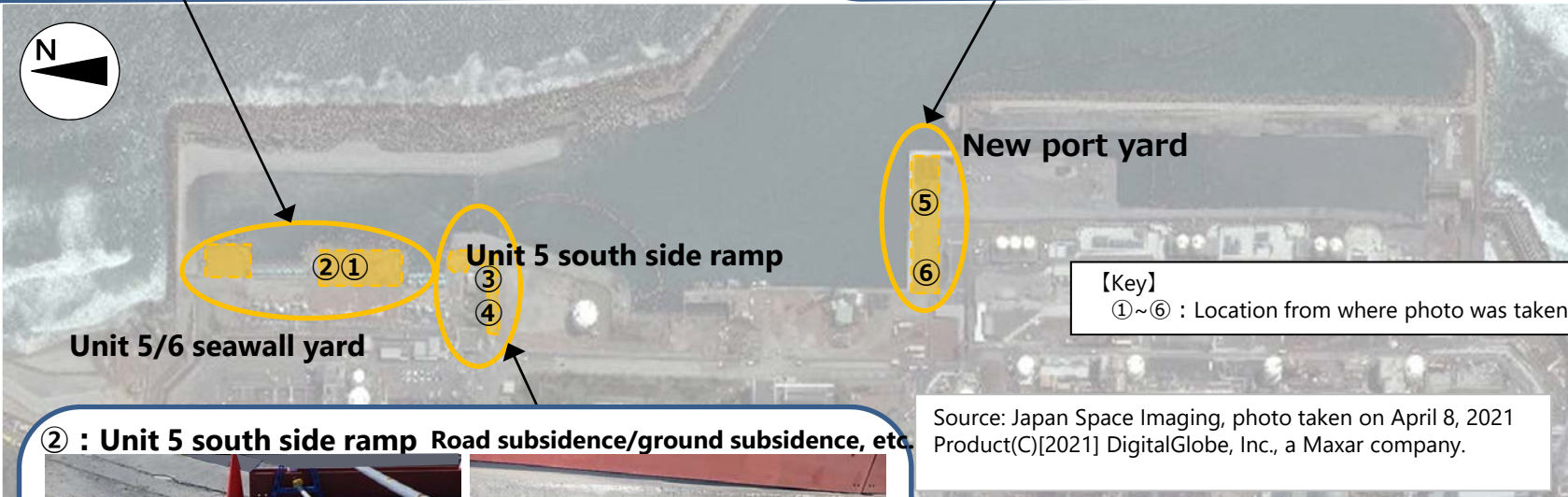


Surface cracks/ground subsidence



③ : New port yard

Subsidence and cracks in the asphalt/ subsidence of the entire seawall/displacement, etc. of seawall blocks



② : Unit 5 south side ramp Road subsidence/ground subsidence, etc.



Source: Japan Space Imaging, photo taken on April 8, 2021
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Situation after the earthquake

■ **Common auxiliary operations facility Condition of the ceiling crane in the cask loading/unloading area**

Time of discovery: Around 12 PM, March 18

Overview: Common auxiliary operations facility Condition of the ceiling crane in the cask loading/unloading area

- An operations check of the ceiling crane (currently undergoing inspection) in the common auxiliary operation building cask unloading/loading area found that the ceiling crane does not run back and forth.
- A visual inspection has found two cracks in the gear coupling covers for the running wheels.
- A thorough inspection will be performed to check for nonconformances with the running drive mechanism and electrical/control systems.
- A thorough inspection will be performed to check for nonconformances with the running drive mechanism and electrical/control systems. And, it has been confirmed that there are no problems with common pool fuel cooling

Situation after the earthquake



Common pool



Ceiling crane in the cask loading/unloading area

A ceiling crane has been installed on the first floor in order to load casks are brought into the common pool building on to transport dollies.

