List of Accidents and Breakdowns at Nuclear Power Plants and Nuclear Fuel-related Facilities (April 1, 2024 to March 31, 2025)

Year	Date	Facility Name	Overview of Accident or Breakdown	Category
2024	Apr.8	Kashiwazaki-Kariwa Unit 4	**Four restriction bars on exhaust pipe expansion joints were broken in a high-pressure core spray emergency diesel generator.**	M
	Apr. 17	Kashiwazaki-Kariwa Unit 7	**Control rod drive motor power supply breakdown.**	M
	Apr. 24	Fukushima Daiichi	**The on-site power supply A system stopped due to damage to the power supply cable caused by excavation work on the west side of the large equipment inspection building.** Due to the shutdown of the on-site power supply A system, the ALPS-treated contaminated water discharge equipment stopped automatically (operation resumed on the same day). The excavator operator was injured when the power supply cable was cut. He was diagnosed with second-degree burns on his right cheek and right forearm.	M
	Apr. 25	Shika Unit 2	**Fuel pool cooling purification pump A stopped automatically.** An abnormal flow was detected when pump B of two operating fuel purification pumps was stopped for inspection of the fuel purification system. An alarm sounded to report an abnormal flow rate, and the remaining pump A also stopped automatically. This occurred due to failure to reduce the discharge flow of the pump.	M
	Apr. 30	Shimane Unit 2	**Fire occurred in a temporary electricity distribution box set up for welding work in the turbine building.** Chugoku Electric Power Co. assumed that the temporary distribution box caught fire because it was not properly grounded, causing a short circuit to occur during welding work.	M
	May 8	Ohi Unit 4	**When a large number of jellyfish invaded the water intake area, the dust removal system basket was deformed, causing two dust removal devices to stop.**	M
	May 15	Sendai Unit 2	**Error in the procedure for restoration of an emergency airlock leak rate test pointed out by the Nuclear Regulation Agency (NRA).** On December 14, 2023, when an emergency airlock leak rate test was conducted while Sendai Unit 2 was in operation, it was found during restoration work that the inner door, which should not open, actually opened while the outer door was still open. On May 15, 2024, NRA pointed out an error in the procedure.	M
	May 15	Sendai Units 1 & 2	**NRA pointed out that sufficient fuel was not stored for vehicles to respond to severe accidents.** On January 16, 2024, during an inspection of the situation at the Sendai Nuclear Power Station, NRA pointed out that sufficient fuel was not stored for vehicles (tank trucks) to respond to severe accidents. On May 15, 2024, the NRA pointed out that sufficient fuel was not stored because the amount of fuel required to maintain a response to an accident for 7 days and how the fuel should be stored had not been sufficiently studied.	M
	May 15	Sendai Unit 1	**NRA pointed out that the fire barrier function had been lost due to failure to carry out compensatory measures when the equipment entrance between fire compartments was left open.** On August 31, 2023, when the nuclear power inspector patrolled Unit 1 during operation, the cover of the equipment entrance in the floor of the fire compartment of the reactor auxiliary cooling water pump reactor auxiliary cooling water cooler room was removed, and that for three hours a situation existed in which the auxiliary water pump power valve panel room on the lower floor was not separated by a fire barrier, and no fire inspector was deployed. On May 15, 2024, NRA pointed out that a similar situation had also occurred on September 1.	M
	May 15	Tokai Daini	**NRA pointed out that scaffolding and construction materials and equipment had been placed without ensuring sufficient distance from safety equipment.** On January 25, 2024, temporary scaffolding and temporary construction materials were placed near the central control room emergency ventilation and air-conditioning system and the reactor building air supply isolation valve without ensuring sufficient distance to maintain the functions of safety equipment. In addition, used control rods were moved in the spent fuel pool without satisfactory separation distance. A subsequent investigation found that the separation was also insufficient for the central control room emergency ventilation and air-conditioning systems A and B, the reactor building air supply isolation valve A, the reactor protection system AC power supply equipment, the reactor building gas processing system A, the emergency diesel generator 2C, the emergency diesel generator fuel oil system, and the DC power supply equipment, this being pointed out by NRA on May 15, 2024.	M
	May 23	Rokkasho reprocessing plant	**The ventilator fan A stopped due to breakdown in the high-level liquid waste vitrification building.** Japan Nuclear Fuel surmised that the failure was caused by a check valve that got stuck in the closed position on the downstream side of the ventilator fan.	M
	May 27	Genkai Unit 4	**One of two electric auxiliary water pumps did not start during an emergency power supply function inspection.** The cause of the problem was found to be that the breaker of one of the electric auxiliary water pumps (a pump for supplying water from a condensate pit to a steam generator in an emergency) was not operating.	M
	June 12	Onagawa Unit 2	**Unscheduled operation of the emergency gas treatment system during an inspection of the air-conditioning in the reactor building**	M

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2024	June 18	Fukushima Daiichi Unit 6	**The high-voltage power supply panel 6C stopped, and at the same time the spent fuel pool cooling and purification pump (B) automatically stopped.** As the power supply panel 6C stopped, the emergency diesel generator automatically started, and a fire alarm was set off in the first-floor basement of the turbine building. TEPCO explained that it found discoloration on the duct support of the non-segregated phase bus and confirmed damage to the duct cover caused by an arc. The spent fuel pool cooling and purification pump (B) restarted about 10 hours later.	M
	June 24	Ikata Unit 3	**A breakdown occurred in the seawater outlet valve of the reactor auxiliary cooling water cooler 3D.**	M
	July 16	Rokkasho uranium enrichment plant	**Radioactive waste liquid leaked from a pre-sludge discharge valve of a coagulation sedimentation tank in a controlled wastewater treatment room.** About 1.5 liters of water was found to have leaked within a sluice in a controlled wastewater treatment room. This was due to age-related hardening of the natural rubber diaphragm in the diaphragm valve used as the pre-sludge discharge valve.	M
	July 19	Genkai Unit 4	**The operation confirmation deadline for the large-capacity air-cooled generator, which is one of the facilities for handling severe accidents, was exceeded.**	M
	July 26	Hamaoka Unit 3	**During a test of the emergency diesel generator (A), output failed to rise to 95% or more.**	M
	Aug. 1	Ikata Unit 3	**Water containing radioactivity leaked from the flange of the primary coolant pump 3C sealing water injection system piping. The amount of the leakage was 14 liters and the amount of radioactivity leaked was 270 thousands becquerels.**	M
	Aug. 28	Tomari	**During an inspection of the incinerator exhaust system, it was discovered that the intake and exhaust of a dust sampler with a backup timer had been connected in reverse.**	M
	Aug. 30	Tsuruga Unit 2	**Two heat transfer tubes of the reactor auxiliary cooler B were damaged, causing cooling water to leak into the sea side.**	M
	Sep. 7	Shimane Unit 2	**A fire occurred damaging a concrete curing mat during welding work outside the west side of the reactor building.**	M
	Sep. 13	Onagawa Unit 2	**The emergency gas treatment system activated unexpectedly during measures to prevent automatic activation of the emergency gas treatment system.**	M
	Oct. 2	Ikata Unit 3	**The reactor was shut down due to malfunction of the in-core instrumentation system.** When the reactor was started up and power distribution in the reactor was measured during a periodic inspection, as the detection signal from the in-core instrumentation system was not displaying on the in-core instrumentation panel, the reactor was shut down. As the grounding circuit of the newly designed and installed high-voltage generating board had been inappropriately installed, the detector signal flowed through the grounding circuit.	M
	Oct. 10	Mihama Unit 3	**Damage to main seawater return pipes of the primary cooling water cooler system.** On October 5, during an on-site inspection, an operator found salt depositions at two locations in the main pipe of the C system of the three main return pipes of the seawater system (A, B, C) of the primary cooling water cooler. (The primary cooling water cooler is a device that cools the pumps and motors of the primary system.) On October 10, as two holes (about 3 mm in diameter and about 6 mm in diameter), apparently due to corrosion wastage, were found in the main return pipe of the seawater system of the C system, Mihama Unit 3 was shut down on October 15. The piping was made of 12 mm thick carbon steel with a polyethylene resin coating (polyethylene lining) on the inner wall. The holes were found just on the downstream side of the butterfly valve used to control the flow rate in the system, and the thickness of the pipe had thinned to between 2.7 to 6.2 mm in this area. As the polyethylene resin coating had been found to have peeled off during the previous periodic inspection, an epoxy resin coating had been applied in this location. Kansai Electric Power Co. assumed that the epoxy resin coating peeled off during operation and the pipe thickness decreased because the epoxy resin was weak against wall thinning (especially erosion due to cavitation). The pipe was replaced with one which had a polyethylene resin coating, and the reactor was restarted on November 21.	T
	Nov. 3	Onagawa Unit 2	**The reactor was shut down when the mobile in-core instrumentation system became immobile.** During the preparation for resumption of power generation, when the detectors of the mobile in-core instrumentation system were removed to calibrate the detectors for measuring neutrons and then replaced into the reactor, one of the four detectors of the mobile in-core instrumentation system stopped working. The reactor was shut down and the cause was investigated. As a result, it was found that the following phenomena had occurred: (1) the connector between the expansion joint and the guide pipe for sending the detector into the reactor was disconnected, (2) the detector cable had a bend in it, and (3) the connector between the guide pipe and the flange joint of the reactor containment vessel penetration was disconnected.	M
	Nov. 6	Takahama Unit 2	**During shutdown of the nuclear reactor, the indicated values of the neutron flux measuring equipment (neutron source area) could not be displayed on the central control panel.**	M

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2024	Nov. 7	Shika Unit 2	**Blowout panel of the reactor building found open.** When air blowers and distributors for the reactor and turbine buildings were shut down for an inspection of the air-conditioning equipment, the blowout panel on the east side of the north wall fifth floor of the reactor building was found open by about 5 cm. Hokuriku Electric Power Co. explained that this occurred because the blowout panel clip had been deformed due to the Noto Peninsula earthquake on January 1, 2024.	M
	Nov. 10	Ikata Unit 3	**Only one external power supply system was connected to the power station, violating operational restrictions.**	M
	Nov. 13	Rokkasho reprocessing plant	**In the high-level liquid waste vitrification building, the monitoring function of the building ventilation system and four air exhausters on the vent gas treatment system in the towers and tanks temporarily stopped.**	M
	Nov. 13	Tomari	**Radioactive gaseous waste measuring device software not correctly updated.** When the software of a measuring device for gaseous waste discharged from an incinerator chimney of a radioactive gaseous waste treatment building was updated, the function of multiplying the measured values of iodine and particulate matter by the dilution correction factor was not reflected.	M
	Nov. 15	Rokkasho reprocessing plant	**In the high-level liquid waste vitrification building, it was confirmed that an air blower in the towers and tanks waste gas treatment system had broken down.**	M
	Nov. 21	Tsuruga Unit 1	**A crack appeared in the casing of an asphalt solidification facility water spray fire extinguishing pump.**	M
	Nov. 21	Tokai/Tokai Daini	**Burn marks were confirmed on the power supply panel of the air conditioning building at the Science Museum of Atomic Energy (PR Center)**	M
	Nov. 21	Kashiwazaki-Kariwa Unit 7	**A satellite phone became unusable at the emergency response center.** One of the five Unit 7 satellite phones, installed at the Unit 5 emergency response center building, became unusable. An abnormality was found in an electronic component of the outdoor antenna No. 1. While no abnormality was found in terminal No. 1, which had become unusable, it was replaced with a spare one.	M
	Dec. 9	Tokai Daini	**A worker was injured when his clothes caught fire during welding work at the water intake area.** A worker was injured when his clothing caught fire during welding work to dismantle a water intake portal crane at the water intake area. He was taken to hospital by ambulance.	M
2025	Jan. 10	Fukushima Daiichi	**Safety inspectors patrolling the site confirmed that a subcontractor worker was supplying fuel (diesel oil) without stopping the power generation engine.**	M
	Jan. 10	Ikata Unit 2	**A (spontaneous ignition) fire occurred in the basement of the auxiliary building of the nuclear reactor, where flames were generated from putty materials.**	M
	Jan. 14	Kashiwazaki-Kariwa Unit 7	**A satellite phone became unusable at the emergency response center.** One of the five satellite phones of Unit 7, installed at the emergency response center in the Unit 5 building, became unusable. While no abnormality was found in terminal No. 2, which had become unusable, it was replaced with a spare.	M
	Jan. 21	Tsuruga Unit 2	**A large number of corrosion marks were found in the lower part of clothes washing liquid waste monitor tanks (A and B) located in the first basement of the auxiliary reactor building.**	M
	Jan. 27	Rokkasho reprocessing plant	**In the head-end building, exhaust blower B of the waste gas treatment system for towers and tanks broke down and stopped.** An alarm sounded at exhaust blower B, and blower A was switched on. Scorch marks were found on the motor drive of blower B. When the motor was sent to the manufacturer for an overhaul inspection, it was confirmed that the drive side bearing was damaged. It is assumed that the motor was overloaded because the rotor was biased due to the damaged bearing. Japan Nuclear Fuel Ltd. explained that the cause was that the drive side and non-drive side bearings were not filled with sufficient grease during the previous overhaul inspection (Sep. to Oct. 2024).	M
	Jan. 27	Kashiwazaki-Kariwa Unit 7	**Flashing light warns of abnormality in satellite phone at the emergency response center.** One of the five Unit 7 satellite phones installed at the emergency response center in the Unit 5 building showed a flashing alarm light. There was no abnormality in the terminal. As an abnormality was found in an electronic component on outdoor antenna No. 5, it was replaced with a spare part.	M
	Jan. 31	Kashiwazaki-Kariwa Unit 7	**The satellite phone in the main control room became unusable.** When an existing satellite terminal was replaced with a standby satellite terminal to implement additional installation work on a satellite phone installed in the main control room, the terminal stopped during startup and communication became impossible. A connector between the terminal and antenna cables was found to be corroded. TEPCO assumed that water had entered the connector, causing a short circuit, making communication impossible.	M
	Feb. 3	Fukushima Daiichi	**Fire occurred at a dust collector in a warehouse for inspection instruments and equipment, Building B, which is the site of horizontal tank dismantling work.**	M

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2025	Feb. 4	Tokai Daini	**Control panel in the main control room bursts into flames.** When carrying out an operational test of the share valve (a valve for isolating the containment vessel in an emergency) of the mobile in-core instrumentation facility in the main control room, the slow-blow fuse (0.5 A capacity) in the internal circuit of the mobile in-core instrumentation facility was replaced with a large-capacity fuse (10 A capacity, the test condition when shipping from the factory), thus diverging from the work procedures manual. After that, the key switch of the share valve remained in the 'on' position. About 30 seconds later, flames and smoke arose from a gap in the control panel. The flames were extinguished with a carbon dioxide fire extinguisher. Japan Atomic Power Co. assume that abnormal heat generation occurring in the control panel due to the use of the wrong fuse and long energization time caused the terminal block to burn.	M
	Feb. 12	Takahama	**Primary cooling water flowed into the containment sump from the excess extractable water cooler cooling water outlet safety valve.**	M
	Feb. 19	Genkai Unit 3	**NRA pointed out the lack of consideration concerning radiation exposure reduction measures when entering controlled areas (high-dose areas) when a fire alarm sounds.** On July 31, 2024, when a fire alarm malfunction alarm sounded in the main control room and two operators entered the site, they were wearing personal dosimeters without an alarm function. At Genkai Unit 3, personal dosimeters with an alarm function are normally supposed to be worn when entering the controlled area through the access control room. On February 19, 2025, NRA pointed out that insufficient consideration had been given to radiation exposure reduction due to the wearing of personal dosimeters without an alarm function when entering high-dose areas when a fire alarm sounded.	M
	Feb. 19	Genkai Unit 3	**NRA pointed out a radiation protection failure due to workers being exposed to water containing radioactivity from the primary system during work to remove pressurizer safety valves.** During a periodic inspection in November 2023, water was drained from the upper piping of the pressurizer to inspect three safety valves of the pressurizer at Genkai Unit 3. At this time, the first safety valve was removed while the inside of the piping was still pressurized with nitrogen, exposing the workers to water containing radioactivity remaining in the piping. Although the work was stopped temporarily, the workers were exposed to water containing radioactivity when they continued to work on the second and third valves while they were still pressurized. Regarding this incident, NRA pointed out on February 19, 2025 that "After the first spraying of water, work resumed without planning and approval of radiation protection measures."	M
	Feb. 20	Shimane Unit 2	**The pressure containment vessel (PCV) atmosphere monitor, which monitors the hydrogen and oxygen concentrations in the PCV, experienced data transmission problems.**	M
	Feb. 27	Ohi Unit 3	**Increase in exhaust gas monitor readings.** Between 12:53 and 13:12 on 27 February 2025, the exhaust cylinder gas monitor indicated a maximum of 1191cpm. (radiation counts per minute. The normal value is about 480cpm.). On the same day, work to remove gas sampling racks was ongoing at the waste treatment building of Units 3 and 4 and gas sampling was being implemented at the volume control tank of Unit 4. Kansai Electric Power Co. assumes that insufficient isolation was ensured when the racks were removed and that gas that leaked during gas analysis was discharged from the Unit 3 exhaust cylinder.	M