List of Accidents and Breakdowns at Nuclear Power Plants or Nuclear-Related Facilities

Year	Date	Facility Name	Overview of Accident or Breakdown	Cate-gory
2023	Apr 11	Kashiwazaki-Kariwa Unit 5	**A fire broke out near a washing machine motor on the 1st floor of the laundry building.**	M
	Apr 13	Fukushima Daini Unit 4	**Air influx from controlled area to an uncontrolled area in the charcoal building:** air found flowing from controlled area to an uncontrolled area in the charcoal building, which houses devices such as activated charcoal filters for adsorbing radioactive gases.	M
	Apr 13	Rokkasho Uranium Enrichment Plant	**1,000 liters of hand-washing waste water leaked in the Uranium Enrichment Plant Building's controlled area.**	M
	Apr 20	Mihama Unit 3, Ohi Units 3 and 4, Takahama Units 1, 3 and 4	**Satellite phones (mobile phones) inoperable due to a circuit failure in carrier's satellite:** The plants' satellite phones were rendered inoperable due to a circuit failure in telecommunications carrier's satellite. Service was restored on April 28.	M
	Apr 20	Ikata Unit 3	**Some satellite phones inoperable due to circuit failure in carrier's satellite:** Some of the plant's satellite phones rendered inoperable due to circuit failure in telecommunications carrier's satellite. Service was restored on April 28.	M
	Apr 22	Takahama Unit 3	**Water level indicator of steam generator C showing decreased level due to transmitter abnormality.**	M
	May 17	Sendai Units 1 and 2	**Insufficient measures taken, such as bag inspections at entrances and exits of protected areas.**	M
	May 17	Sendai Units 1 and 2	**Errors occurred in calculations of radionuclides in air.**	M
	May 29	Takahama Unit 4	**Seawater penetrating steam condensers.** In two of three steam condensers, seawater penetrated into the condensers from the A2 water chambers. When eddy current probes were conducted for the tubules (made of titanium) of the A2 water chambers, as damage was discovered in 192 of them, those tubules were plugged. In addition, as a hole was found in part of the filler in the air extraction flange, the filler was reconstructed.	M
	Jun 8	Ikata Unit 3	**Insufficient notice given of labeled certified devices based on the Act on the Regulation of Radioisotopes, etc.**	M
	Jun 14	Onagawa Units 1, 2 and 3	**A fire broke out on the premises during welding work on a framework holding plastic pipes in place.**	M
	Jun 29	Onagawa Unit 1	**Problems arose when the refueling machine became inoperable due to malfunctioning of the machine's on-board console panel computer.**	M
	Jul 19	Tokai Daini	**Burns found on the terminal block inside the dryer's control panel in the service building's laundry room.**	M
	Jul 26	Ikata Unit 3	**A server failure in the monitoring camera system's control panel in the spent fuel pit stopped display images from the surveillance camera from being displayed on the monitor.**	M
	Jul 27	Ikata Unit 3	**Oil leakage from pipe flange on Fuel Tank A of emergency gas turbine generator.**	M
	Aug 7	Kashiwazaki-Kariwa Unit 6	**Damage to air supply filter of central control room ventilation and air conditioning system.**	M
	Aug 8	Shika Unit 1	**Leakage of fuel oil from emergency diesel generator piping.**	M
	Aug 15	Takahama Unit 1	**Failure of CH4 high-range area monitor in containment vessel.**	M
	Aug 23	Sendai Units 1 and 2	**Deficient measures for system isolation cables for protection from fire.**	M
	Aug 23	Genkai Units 3 and 4	**Deficient measures for system isolation cables for protection from fire.**	M
	Aug 23	Genkai Unit 3	**Safety Auxiliary Equipment Room 3B cooling unit missed deadline for periodic inspection by operator.**	M
	Aug 31	Tsuruga Unit 2	**Fire broke out in water supply treatment building during tank welding operations.**	M
	Sep 1	Hamaoka Unit 4	**Small hole confirmed in dust removal equipment of reactor auxiliary seawater cooling system.**	M
	Sep 14	Shika Unit 1	**Emergency cooling water system of refrigeration system's ventilation and air conditioning auxiliary equipment shut down.**	M
	Sep 21	Hamaoka Unit 3	**Failure of electric valve in dust removal equipment of reactor auxiliary seawater cooling system to operate.**	M
	Oct 4	Rokkasho High-Level Radioactive Waste Storage Center	**Entire High-level Radioactive Waste Storage Center shut down, with loss of negative pressure in one part:** When the on-site control panel (common equipment control panel) in Vitrified Waste Storage Building B (Building EB2) was turned off during construction work to update monitoring control panels and on-site control panels, the power supply to the signaling device for monitoring and controlling the equipment was cut off, and all exhaust pipe system units in the storage pit in Building EB2 along with the air supply/exhaust system in the control area stopped functioning (three units in operation stopped and three in standby disabled). Furthermore, in the adjacent building where vitrified waste is received (Building EA) and another vitrified waste storage building (Building EB), all air supply/exhaust units stopped (four operating units stopped and four in standby disabled), except for the exhaust pipe system in the storage pit (one unit operating and one in standby). The functioning of the exhaust pipe system in Building EB2 was restored four minutes after the incident, and the rest, after about an hour and 20 minutes, but there was a temporary loss of the negative pressure normally maintained in the conveyance room of Building EB2.	M
	Oct 6	Kashiwazaki-Kariwa Units 6 and 7	**After a periodic inspection of equipment for handling major accidents etc. of large-capacity water delivery vehicles, oil leakage occurred from hydraulic piping of the submersible pump hose reels at the rear of the vehicle.**	M
	Oct 10	Shika Unit 2	**Faulty circuit board found in control unit of inner main steam isolation valve.**	M
	Oct 12	Shika	**Leakage of liquid from drums in solid waste storage (no radioactivity detected).**	M
	Oct 17	Takahama Unit 3	**Damaged heat transfer tubules in steam generator:** When eddy current probes were conducted for the heat transfer tubules of three steam generators, A, B and C, during a periodic inspection for damage, the outer surface of a tubule in Steam Generator A was found to be damaged by scale (iron oxide film that had peeled off), resulting in a scratch of 7 mm in the circumferential direction to about 63% of its depth. In addition, a stress corrosion crack was found in the surface of one tubule in Steam Generator C. Kanden had the two damaged tubules plugged so they couldn't be used. Of the total 9,776 tubules in Takahama Unit 3, with the inclusion of these two, 372 have been plugged. The steam generators at Takahama Unit 3 are scheduled to be replaced during the 28th periodic inspection, which is the one after next.	T

	Oct 25	Fukushima Daiichi	**Contamination accident during pipe cleaning at expanded ALPS facility:** During cleaning work in the cross-flow filter outlet pipe (System B) of the expanded ALPS facility, a temporarily installed hose broke free from the receiving tank in which the cleaning waste fluid was being transferred, spraying two workers nearby with the waste fluid. Their contamination was measured in the on-site emergency room, where radioactive contamination was detected on the bodies of the two workers sprayed with the waste fluid and two others who cleaned up the waste fluid. Subsequent evaluation showed the two who had been sprayed as having respective exposures of 88.3 mSv and 55.8 mSv equivalent doses of the skin.	M
	Oct 31	Tokai Daini	**Burn marks found on ceiling lighting ballast in the reactor building on the northeast side of the second floor.**	M
	Nov 1	Rokkasho Uranium Enrichment Plant	**Oil found dripping in the oil-retaining barriers of the reception ports in the outdoor light oil tank and heavy oil tank at the uranium-enrichment plant.**	M
	Nov 6	Mihama Unit 3	**A power outage of another company's transmission lines caused a spare transformer to trip, preventing power reception from the outside.**	M
	Nov 7	Tokai Daini	**Smoke emerged from an air compressor on the first floor of the mortar building.**	M
	Nov 9	Tokai Daini	**Spark generation resulting from introduction of a breaker for outdoor lighting.**	M
	Nov 22	Genkai Units 3 and 4	**Failure to implement system separation measures for fire protection and other equipment due to incorrect fire impact assessment when selecting that equipment.**	M
	Nov 22	Genkai Units 3 and 4	**Of 4,850 fire detectors installed in turbine-assisted feed pump rooms and other places, 244 found to be improperly installed.**	M
	Nov 22	Ikata Unit 3	**One of four channels of the output range neutron flux gauge found to be defective in the central control room indicator display.**	M
	Nov 22	Sendai Units 1 and 2	**Failure to implement system separation measures for fire protection and other equipment due to incorrect fire impact assessment when selecting the equipment.**	M
	Nov 22	Kashiwazaki-Kariwa Unit 7	**Operation of over-speed arresting piston in Emergency Diesel Generator (A):** During a no-load test operation after an inspection of Emergency Diesel Generator (A), the generator stopped with no increase in the speed of the engine. The operation of the over-speed arresting piston will be checked.	M
	Dec 18	Mihama Unit 3	**Inoperable condition due to failure to complete the inspection of the fuel transport pump before loading the fuel into the reactor.**	M
	Dec 23	Mihama Unit 3	**A power outage affecting another company's transmission line caused a spare transformer to trip, preventing power from being received from the outside.**	M
2024	Jan 1	Shika Unit 1	**Damage to facilities caused by the Noto Peninsula Earthquake (M7.6):** An oil leak (3,600 liters) from a start-up transformer occurred due to shaking caused by the Noto Peninsula Earthquake (maximum acceleration of 399.3 gal observed on the 2nd basement floor of the Unit 1 reactor building), and the discharge plates of the main transformer and on-site transformer were activated. For this reason, they switched to spare transformers. In addition, about 95 liters of water (with 17,100 Bq) escaped from the spent fuel pool due to sloshing, and the water level in the turbine's auxiliary cooling water system fell.	T
	Jan 1	Shika Unit 2	**Damage to facilities caused by the Noto Peninsula Earthquake (M7.6):** An oil leak (19,800 liters) from the main transformer occurred due to the shaking caused by the Noto Peninsula Earthquake, and the discharge plate was activated. For this reason, they switched to a spare transformer. An oil leak (100 liters) was also confirmed from the excitation transformer. In addition, about 326 liters of water (with 4,600 Bq) escaped from the spent fuel pool due to sloshing.	T
	Jan 1	Shika Unit 2	**Damage to facilities caused by the Noto Peninsula Earthquake (M7.6):** A warning went off about a low-pressure turbine "elongation difference" due to shaping from the earthquake.	M
	Jan 16	Kashiwazaki-Kariwa Unit 5	**Oil leakage occurred from a fuel pipe joint after a periodic test of the diesel generator for a high-pressure core spray system.**	M
	Jan 17	Kashiwazaki-Kariwa Units 6 and 7	**Adhesion of foreign matter to the exhaust port of the first Gas Turbine Generator for Common Use (A).**	M
	Jan 17	Shika Unit 1	**Automatic shutdown of the diesel generator for the high-pressure core spray during a test after an aftershock from the Noto Peninsula Earthquake.**	M
	Jan 22	Takahama Unit 4	**Damage to steam generator heat transfer tubules:** When eddy current probes were conducted for the heat transfer tubules of three steam generators, A, B and C, during a periodic inspection, two scrapes that appeared to be due to scale (iron oxide film peeling off) were found externally near the tubule support plate of Steam Generator A and two more similarly in Steam Generator C. Kanden plugged the four tubules that had been found to be damaged, disabling them. Of the total 9,731 tubules in Takahama Unit 4, with the inclusion of these four, 415 have been plugged. The steam generators at Takahama Unit 4 are scheduled to be replaced during the 27th periodic inspection, which is the one after next.	T
	Jan 24	Takahama Unit 1	**Steam leakage from feed water booster pump inlet pipe:** During operation with constant rated thermal output, an operator on patrol discovered steam leaking from a vent pipe for the inlet pipe of the Water Supply Booster Pump B on the first floor of the turbine building. The standby Pump C was engaged and Pump B was stopped. Later, as an increase in the amount of drainage from the shaft seal of Pump A was found, Pump A also halted. Because of that, the electrical output was reduced to 40%. A fully penetrating 35 mm-long crack resulting from fatigue was found in the circumferential direction near a welded part of the vent pipe of Pump B.	T
	Jan 30	Hamaoka	**A failure to follow work procedures occurred in the radiation control area during scaffolding installation work for exterior painting of the Waste Volume Reduction Treatment Equipment Building (Building 1).**	M
	Feb 2	Tokai Daini	**Sparks and burn marks were detected near the electric conduit in the ceiling of the northwestern part of the 2nd floor of the reactor building.**	M
	Feb 7	Fukushima Daiichi	**Water from SARRY Second Cesium Absorption Apparatus found leaking from a pipe on the east wall of the High Temperature Incinerator Building:** A worker discovered water containing radioactivity leaking from the mouth of the vent line of the Second Cesium absorption apparatus (SARRY) on the east wall of the High Temperature Incinerator Building. The SARRY, which was stopped at the time, was cleaned with filtered water to check the valve. The valve, which should have been closed, was open, so the cleaning work caused a large amount of water to flow into the drainpipe. TEPCO surmises that the SARRY system water and filtered water, which the drainpipe could not handle completely, flowed into the vent pipe. The amount that leaked was evaluated at about 5.5 cubic meters, containing an estimated 22 billion Bq of radioactivity in total gamma radiation.	T
	Feb 8	Shika Unit 1	**Smoke and sparks confirmed in the fan room on the second floor of the turbine building from a bearing on the reactor building's Main Exhaust Fan B.**	M
	Feb 21	Sendai Unit 2	**Installation of temporary scaffolding interfered with the upper lid of a seawater strainer, part of the equipment and materials for dealing with serious accidents.**	M
	Feb 22	Fukushima Daiichi	**Steam generation caused the fire alarm at the additional miscellaneous solid waste incineration facility to malfunction.**	M

	Feb 26	Tsuruga Unit 2	**Diesel Generator A excluded due to suspension of an inspection for seawater leakage in the reactor's auxiliary seawater cooling system.**	M
	Mar 14	Ikata Unit 2	**Boric acid leaked from a fuel replacement water tank pump outlet line during decommissioning procedures.**	M
	Mar 19	Ikata Unit 3	**Improper design management caused deficiencies in system isolation measures for cables subject to fire protection.**	M
	Mar 26	Genkai Unit 4	**Alarm generated indicating uneven output in the reactor during a drop in output.**	M