

Fukushima Daiichi Nuclear Power Station Missions timeline

Remediation of Large Contaminated Area Off-site Fukushima Daiichi Nuclear Power Station

- Oct 2011: Remediation Mission
- Oct 2013: Follow up Remediation Mission
- Jan 2012: Review Japan Safety Assessments NPPs
- Aug 2012: Expert Mission to Onagawa NPP

Peer Review Mid-and-Long-Term Roadmap towards Decommissioning

- April 2013: 1st Mission
- Dec 2013: 2nd Mission
- Feb 2015: 3rd Mission
- Nov 2018: 4th Mission
- Jun–Aug 2021: 5th Mission

Marine Monitoring Confidence Building and Data Quality Assurance

Monitoring and Sampling Missions

- Sept + Nov 2014
- May + Nov 2015
- May + Nov 2016
- Oct 2017
- Oct 2018
- June 2019
- Nov 2020

ALPS Treated Water Safety Missions

- September 2021: Kick-off Mission

Background

On 11 March 2011, Japan was shaken by what became known as the Great East Japan (Tōhoku) Earthquake. It was followed by a tsunami which resulted in waves reaching heights of more than 10 meters. The combined impact and repercussions of the earthquake and tsunami caused great loss of life and widespread devastation in north-eastern Japan.

The IAEA's Incident and Emergency Centre (IEC) received information from the International Seismic Safety Centre at approximately 08:15 Vienna Time concerning an earthquake with a magnitude of 9.0 near the east coast of Honshu, Japan's main island. This was followed by an accident at the Fukushima Daiichi Nuclear Power Station, which was ultimately categorized as a Level 7 — Major Accident — on the International Nuclear and Radiological Event Scale.

In the initial days following the accident, the IAEA established teams to evaluate key nuclear safety elements and assess radiological levels. IAEA Laboratories reviewed environmental data provided by the Japanese authorities on monitoring of the marine environment and also received terrestrial environment samples for independent analysis to examine and assess the radiation levels. The IAEA posted daily updates for its Member States and the public on the IAEA website to provide information on the actions taken soon after the accident.

By September 2011, the IAEA developed the Action Plan on Nuclear Safety (Action Plan), endorsed by IAEA Member States, which defined a programme of work to strengthen the global nuclear safety framework in response to the accident. In addition to the Action Plan, a great deal of work has been conducted worldwide to strengthen nuclear safety. Through initiatives such as the European Stress Test, the adoption of the Vienna Declaration on Nuclear Safety in accordance with the objectives of the Convention on Nuclear Safety, as well as the multitude of national and regional initiatives, many safety improvements have been developed and implemented.

Work to implement the Action Plan went on to form part of the 2015 IAEA Fukushima Daiichi Accident Report and its five accompanying Technical Volumes. They addressed the accident's causes and consequences and provided a comprehensive understanding of what happened and why, as well as lessons learned. They consider the accident itself, emergency preparedness and response, radiological consequences of the accident, post-accident recovery and the activities of the IAEA following the accident. Measures were taken, both in Japan and internationally.

The IAEA is continuously strengthening and increasing its peer review and advisory missions to Member States, which are conducted at their request. The IAEA Safety Standards have also been reviewed and, where appropriate, revised. All this and several other measures such as the Action Plan on Nuclear Safety are major contributions of the IAEA to further strengthening nuclear safety worldwide after the Fukushima Daiichi accident.

After the announcement of its basic policy in April 2021 to discharge the treated water from the Fukushima Daiichi Nuclear Power Station into the sea, the Government of Japan requested assistance from the IAEA to review the country's plans and activities. The IAEA's assistance will address safety aspects of the handling of the water stored at the Fukushima Daiichi Nuclear Power Station — related to radiation safety of the public and the environment — as well as transparency. The review will be conducted against international safety standards, which constitute a global reference for protecting people and the environment and contribute to a harmonized high level of safety worldwide. The IAEA and Japan on 8 July 2021 agreed on the scope of technical assistance the Agency will provide. The signing of the Terms of Reference marks an important step as the document sets out the broad framework for how the IAEA will review Japan's plans and activities related to the water discharge.

Fukushima Daiichi

Progress in nuclear safety since 2011



Fukushima Daiichi: Progress in nuclear safety since 2011



11 March 2011

The Great East Japan Earthquake caused the accident at TEPCO's Fukushima Daiichi Nuclear Power Station. On 11 March the IAEA initiated a series of independent review missions on different relevant topical areas that continues to this day. (For details please see 'Missions timeline')



11 March 2011

From early morning 11 March until 4 May (54 days), the Incident and Emergency Centre (IEC) was in Full Response Mode. From 4 May to 21 December, the IEC operated in Basic Response Mode.



June 2011

The IAEA Director General Yukiya Amano convened the IAEA Ministerial Conference on Nuclear Safety to direct the process of learning and acting upon lessons following the accident at TEPCO's Fukushima Daiichi Nuclear Power Station.



September 2011

The IAEA Action Plan on Nuclear Safety was unanimously endorsed by Member States at the 55th IAEA General Conference.



December 2012

Ministerial Conference in Fukushima Prefecture, organized by the Government of Japan and the IAEA, to contribute to strengthening nuclear safety worldwide.

Two Practical Arrangements were signed on Cooperation in the area of Radiation Monitoring and Remediation.



May 2013

Designation of the RANET Capacity Building Centre in Fukushima city, following the signature of Practical Arrangements between the IAEA and Fukushima Prefecture on Cooperation in the area of Radiation Monitoring and Remediation.



April 2014

The Convention on Nuclear Safety (CNS) comprises 78 contracting parties, 29 of those have nuclear power plants. All 29 reported on their comprehensive safety assessments in response to the Action Plan on Nuclear Safety, within the framework of the 6th Review Meeting of the CNS.



February 2015

The IAEA Director General convened a Diplomatic Conference on Nuclear Safety in February 2015 where the Contracting Parties unanimously adopted the Vienna Declaration on Nuclear Safety.



August 2015

The Report by the Director General and 5 technical volumes was published and presented at the 59th IAEA General Conference. The aim was to provide an authoritative, factual and balanced assessment, addressing the causes and consequences of the accident.



September 2015

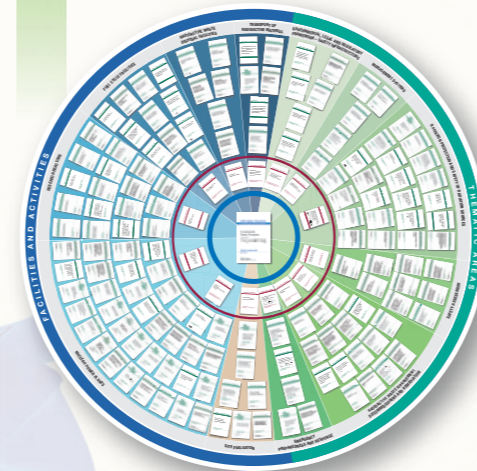
September 2011 marked the inception of the Action Plan on Nuclear Safety Series which was concluded with the publication of its final report in September 2015.

The series is comprised of 12 different reports and provides information on various topics of nuclear safety in light of the Fukushima Daiichi Nuclear Power Station accident with the aim to reinforce nuclear safety, emergency preparedness and radiation protection of people and the environment.



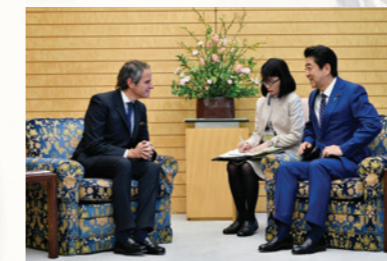
April/May 2016

The Practical Arrangements on Cooperation in the area of Radiation Monitoring and Remediation with the Fukushima Prefecture were initially signed in 2012. In 2016 they were extended and their scope was modified to include long-term monitoring of radioactive material in the forest and associated countermeasures, and treatment of waste containing radioactive material at municipal solid waste incinerators.



April 2019

The revision of the IAEA Safety Requirements to include lessons learned from the Fukushima Daiichi Nuclear Power Station accident was completed and the focus continues to be on revising Safety Guides.



February 2020

The IAEA Director General Rafael Mariano Grossi met the Prime Minister and other senior Japanese officials to discuss progress made so far in decommissioning the Fukushima Daiichi Nuclear Power Station and excellent partnership with the IAEA. He visited the Fukushima Daiichi Nuclear Power Station and other locations in the Fukushima Prefecture and noted the positive developments in revitalizing the region.



July 2021

The IAEA and the Government of Japan signed a Terms of Reference (ToR) that sets out the broad framework for how the IAEA will support Japan in monitoring and reviewing the planned discharge of ALPS (Advanced Liquid Processing System) treated water stored at the Fukushima Daiichi Nuclear Power Station.



Onward 2021

Lessons learned from the accident at TEPCO's Fukushima Daiichi Nuclear Power Station will continue to be acted upon by governments, regulators and nuclear power plant operators in all countries. The outcomes and activities of the Action Plan are being integrated into the IAEA regular structure.

The IAEA continues providing assistance to the Fukushima Prefecture in the area of Radiation Monitoring and Remediation. Information about this cooperation is accessible on the Fukushima Prefecture and IAEA websites. The IAEA will be implementing the safety review related to the discharge of ALPS treated water, based on the ToR signed with the Government of Japan in July 2021.