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## Ten years after the Fukushima disaster in Japan

Last Thursday marked ten years since the Great East Japan Earthquake. The magnitude 9.1 earthquake, the strongest in Japanese history, triggered a massive tsunami that reached as high as 16.7 meters, and their combined power devastated Japan's northeast Tohoku region. The tsunami struck the inadequately protected Fukushima Daiichi Nuclear Power Plant, leading to meltdowns in three out of six reactors and the worst nuclear disaster since Chernobyl in 1986. The devastation that followed the March 11 triple disaster is ultimately an indictment of capitalism, which subordinates safety and human life to the drive for profit.



Japan Earthquake

An estimated 18,500 people were killed, while approximately 2,500 people officially remain missing. Nearly half a million people were forced to evacuate from their homes. Today 41,000 people are still classified as evacuees, with 23,000 unable to return to their homes around the Fukushima nuclear plant. Reconstruction of the region has cost more than 30 trillion yen (\$US275 billion) and it is believed that it could take up to another three decades to complete the decommissioning and clean-up of the nuclear plant.

Water is still being pumped through the damaged reactors at the Fukushima plant to keep them cool, with large amounts of highly radiated water stored in steel tanks outside the facility. The Japanese government and the owner of the plant, Tokyo Electric Power Company (TEPCO), plan on dumping the radioactive water into the Pacific Ocean. This is vehemently opposed by the country's fishermen, who face stigma and potential loss of income out of the public's concern for the safety their catches.

According to TEPCO, the removal of fuel from the storage pool in reactor 3 was completed at the end of February. However, work has yet to begin on reactors 1 and 2 due to high radiation levels that prevent workers from approaching them.

In marking ten years since the catastrophe, a common theme in the bourgeois media is that lessons have been learned—a fact belied by Tokyo's response to another disaster, the COVID-19 pandemic. The criminally inept response to the virus' outbreak and failure to prepare is reminiscent of the events surrounding the earthquake. Both events cost thousands of lives, with the latest COVID-19 toll reaching 8,560 in Japan. Phrases like "testing refugee" entered the language last year as people shared horror stories online of struggling even to get a test, let alone receive treatment.

In reality, disaster after disaster in Japan as in other countries is compounded by the capitalist system. It is not a matter of "learning lessons" as capitalism by its very nature subordinates everything to the drive for profit. These events were not unforeseen or somehow the product of Japanese "groupthink," as one commentary in the *Japan Times* recently put it. The warning signs were consciously ignored.

The notion that somehow Japanese culture was responsible for the Fukushima disaster has been used to deflect blame from the profit system. In 2012, the chairman of the Nuclear Accident Independent Investigation Commission (NAIIC) Kiyoshi Kurokawa claimed the

causes of Fukushima disaster were "to be found in the ingrained conventions of Japanese culture: our reflexive obedience; our reluctance to question authority; our devolution to 'sticking with the program'; our groupism; and our insularity."

This is nothing but a ploy. As the *World Socialist Web Site* has explained from the beginning, the disaster was caused by decades of collusion between governments, the nuclear power industry, and so-called regulatory agencies in order to maximize profits.

When the disaster first struck the Fukushima plant, TEPCO's immediate regard was for its assets. It delayed pumping seawater into the reactors, which may have prevented radiation leaks, because the salt water corrodes reactors. Firefighting resources were also delayed for nearly a week. TEPCO waited two months before admitting there had been meltdowns at the Daiichi plant, something it did not formally acknowledge until 2016. The delay contributed to the confused evacuation and is believed to have led directly to the deaths of at least 44 people.

When the facility was built in 1971, it was constructed to only withstand a tsunami of 5.7 meters with the company removing 25 meters from a natural seawall at the site. "It's a typical act based on the thinking of the high-growth era," seismologist Kazuo Oike said in 2011, while serving on a government panel investigating the disaster. In other words, safety was ignored in the name of profit. The 15-meter tsunami that struck the Daiichi plant in 2011 overwhelmed the existing 10-meter seawall.

After the disaster, it was revealed that TEPCO had at least 200 proven instances of safety inspection falsifications. In 2002, for example, TEPCO had covered up the existence of cracks in core shrouds going back to 1993. In July 2012, the NAIIC found that TEPCO had not reinforced its reactors to meet earthquake standards and the regulatory agency, the Nuclear and Industrial Safety Agency, did nothing to enforce the codes.

To date, no-one has been held responsible for the actions of TEPCO. TEPCO's former chairman Tsunehisa Katsumata and former executives Ichiro Takekuro and Sakae Muto were charged with criminal negligence in 2016 in a trial designed to deflect public criticism, but all three were found not guilty in September 2019.

During their trial, it was shown, based on a 2002 government report, that a 15.7 meter wave could overwhelm the facility if a magnitude 8.3 earthquake struck. While safety measures were planned in 2008, the three executives quickly halted their implementation, fearing that the public would call for ending operations at the plant out of concern for safety. In other words, well aware of the danger that existed, TEPCO's executives chose to place profit over the lives of the people in the region.

More recently, Tokyo's High Court ruled on February 19 that the central government was just as liable as TEPCO for the disaster. The court found that the government had ignored a report that pointed to the possibility of a large tsunami striking the region and ordered the government and the power company to pay 280 million yen (\$US2.6 million) to 43 plaintiffs. The Tokyo High Court pointed out that the construction of coastal embankments and the waterproofing of important equipment in the plant could have prevented the disaster at the Fukushima Daiichi plant.

The Sendai High Court also found the central government liable in September 2020. Seven of fourteen district courts have reached similar conclusions and a decision by the Supreme Court is expected to reach a final conclusion on the matter.

After the Fukushima disaster, all of Japan's nuclear plants were shut down pending review. Only nine are currently operational, supposedly under more stringent safety guidelines, compared to 54 before March 2011. While the government has pressed for more to restart, local communities have protested and mounted legal cases to oppose their operation. Some two dozen nuclear plants are to be decommissioned.

For the fiscal year 2019, nuclear energy contributed just 6.2 percent to the country's electricity generation, down from 30 percent before the Fukushima catastrophe. The government aim is to have nuclear energy accounting for 20-22 percent of electricity by 2030, despite strong doubts being raised by experts. Moreover, the shortfall in power generation has been taken up by coal-fire power stations, with plans to build another 22 in the coming years, compounding air pollution and the dangers of climate change.

Questions also remain about the nuclear plants that have been restarted or are preparing to restart. An article by researcher Jun Tateno entitled "10 years after Fukushima: Are Japanese nuclear power plants safe?" was published last week by the Bulletin of Atomic

Scientists. He reviewed in detail the limitations of the "conformity assessment" devised by the country's Nuclear Regulation Authority after the disaster.

Could a similar nuclear disaster occur again? Jun Tateno concluded his article by stating: "Will the restarted nuclear power plants that have passed the conformity assessment following the Fukushima disaster be able to withstand such an earthquake? In light of current assessment practices, there is reason for extreme pessimism."

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