The Road to Fukushima (and Tokyo Olympics): Forgotten Lessons (Again)

James Simms

Abstract: A decade ago, Japan learned some bitter lessons from the 2011 Fukushima nuclear disaster, after ignoring global and local ones over the preceding four decades. But elements of the country clearly haven't, whether it comes to the atom or dealing with an international event like the Tokyo Summer Olympics during a global pandemic. Because of Japan's mishandling of the pandemic and new variants resistant to vaccines, whether the games, which a majority of the public wanted cancelled or postponed again, would have become a super-spreader event, trigger a new variant or create an explosion of COVID-19 cases or a combination thereof remained a continuing concern. What's clear is that Tokyo put political, bureaucratic and commercial interests ahead of the health and wellbeing of the overall public —similar to what happened in the decades preceding Fukushima.

Keywords: Fukushima, radiation, disaster, nuclear energy, watchdog, Olympics, COVID-19.

An unstoppable, multibillion-dollar juggernaut barreling down the highway. That was Japan's nuclear power industry... until it wasn't.

A decade ago, the nation learned some bitter lessons from the Fukushima nuclear disaster, after ignoring global and local ones over the preceding four decades. But elements of the country clearly haven't, whether it comes to the atom or dealing with an international event

during a global pandemic.

Over the past two years, another juggernaut barreling down the highway might be on a disastrous trajectory, the multibillion-dollar, five-ring circus known as the summer Olympics.

Because of Japan's mishandling of the pandemic, whether the games will go down in history as a super-spreader event or one that created a new variant is unclear. The country hit new records for infections and hospitalizations during the games, partly due to the public relaxing its guard because it was fed up with the contradiction of the government calling for people to stay home when it went ahead with the global event.

Over 80% of the Japanese public have said they should be put off again or cancelled, and more business leaders have questioned holding such an event during a pandemic. The billionaire founder and chief executive of Japanese ecommerce giant Rakuten Group, Mikitani Hiroshi, called plowing ahead with them a "suicide mission."

What's clear is that Tokyo put political, bureaucratic and commercial interests ahead of the health and well-being of the overall public – similar to what happened before regarding Fukushima. It hasn't absorbed its own public health lessons nor those of regional neighbors like Taiwan and South Korea **either.**

While very different in the magnitude and duration of their impact, Japan's nuclear disaster and the post-Fukushima landscape,



and the nation's pandemic response and the related vow to hold the summer Olympics, share some common themes. In the following, I summarize the major themes that ran through Japan's nuclear-industrial complex since its inception in 1950s under the tutelage of the U.S. with the Atoms for Peace program, and that I have explored in more detail in my chapter titled "The Road to Fukushima: A US-Japan History," in the volume Legacies of Fukushima: 3.11 in Context.

Conflict of Interest and Missed Lessons

One major problem is the inherent conflict of interest in having both nuclear power promotion and regulation under one roof—something the U.S. had warned Japan about and Tokyo had rebuffed—and not learning from global best practices and past near misses in the country and abroad. Government and private investigations into the accident cited that conflict as one of the most important factors leading to the unprecedented and preventable triple reactor meltdowns at the Fukushima Daiichi Nuclear Power Plant.

Still, in 2012, Japan made a good start for developing an independent atomic watchdog with the establishment of the Nuclear Regulation Authority. Before the change, Japan's Ministry of Economy, Trade and Industry had overseen energy policy, nuclear power promotion and atomic oversight, after all that authority was consolidated under it in 2001. In 1974, Washington's split of the Atomic Energy Commission's dual mandate led to the creation of the independent Nuclear Regulatory Commission and the Department of Energy, which is responsible for developing commercial atomic power and building nuclear weapons.

Japan's 2012 reform put oversight under the Ministry of the Environment and forced utilities to upgrade the safety features of their nuclear power plants—so much so that reactors were

shut down for not meeting new rules, instead of the past regulatory forbearance, or were decommissioned because of the costs of meeting them. Nearly a decade later, most of those reforms still stand and will be covered later.

Regulatory Capture and the Nuclear Industrial Complex

Japan missed countless opportunities to avert the Fukushima nuclear crisis, but the combination of narrow sectoral interests and larger national security concerns created a system of complacency. The system lacked sufficient oversight and scrutiny. These interests coalesced into what critics called the nuclear village of regulators, utilities, politicians, corporations, and academics who promoted nuclear power and feasted at the atomic trough. In turn, the village spread the myth that nuclear power in Japan was absolutely safe. Loath to admit any potential or actual problems, the village papered over concerns and accidents and downplayed risks to the point of saying that there were none, while some opponents seized on even the smallest incidents to push for plant closings and ending the use of nuclear power. This created a vicious cycle of pro- and antinuclear groups doubling down on their views.

The media aided the nuclear village because of the billions of dollars in electric company advertising, and the regulators depended on the utilities and contractors for expertise and lucrative post-retirement employment known as *amakudari* (descent from heaven). In turn, politicians depended on nuclear power companies, which offered sinecures to former officials, and utilities and their labor unions to provide votes and campaign contributions.

In many of the isolated rural communities where reactors sit, the economic impact of the industry was profound due to the effects of



plant construction, operation, and maintenance, which employed thousands of local citizens, and the billions of dollars in government subsidies.

Equally important, some politicians from the Liberal Democratic Party, which has ruled Japan almost without interruption since 1955, acknowledged (usually quietly) that Japan needed to maintain a latent nuclear weapons capability because neighbors like China and the Soviet Union had atomic arsenals aimed at Tokyo. Japan hasn't taken that route because of the U.S. nuclear umbrella, the legacy of Hiroshima and Nagasaki and fears that it might trigger an Asian atomic arms race.

Atoms of Peace (and War)

Japan's enthusiasm alone did not enable it to become a civilian nuclear power. The U.S. had been a key driver of Japan's nuclear program since the 1950s, after President Dwight Eisenhower's "Atoms for Peace" speech at the United Nations in 1953, where he offered to provide cheap electricity and nuclear isotopes for medical and industrial usage globally. While partly motivated by idealism and altruism, Washington also hoped to **buy off** other nations to reduce their resistance to nuclear weapons and tests and to ensure that the Soviet Union could not use the lure of atomic energy to spread its influence.

Nowhere was that truer than in Japan. In the 1950s, when Japan passed legislation to enable nuclear development, the U.S. conducted successful propaganda efforts to overcome Japanese public opposition to the atom. Eventually, Tokyo became an integral part of the US nuclear industry, global rule-setting agenda, and nonproliferation efforts. While that culminated in Toshiba's acquisition of Westinghouse in 2006 and the nuclear power joint venture between Hitachi and General Electric in 2007, Toshiba nearly failed because

of losses at its nuclear subsidiary, which was sold in 2018, and new nuclear builds in advanced industrial countries have come to a near standstill because of new and expensive post-Fukushima safety requirements and construction cost overruns.

While Washington failed to push Tokyo to improve its nuclear oversight, partly because its dependence on Japan for nuclear plant construction and to spread the financial risk of new reactor development, the U.S. managed to strong arm Japan in 2012 from approving a phase-out of nuclear power.

Japan's New Nuclear Watchdog and the LDP

Even with Japan's nuclear regulatory reforms, critics were concerned that regulators could backtrack once public and media attention waned and memories became fuzzy. The Liberal Democratic Party, after returning to power in 2012, quickly abandoned its own efforts to investigate its role in creating the structures over its half century of, nearly uninterrupted, rule that put Japan on the road to Fukushima. That was after a three-year hiatus when the now defunct Democratic Party of Japan ran the country and oversaw the response to the nuclear, tsunami and earthquake disaster.

More recently, some of those more concrete fears were realized. Examples include the watering down of guidelines for dealing with volcanic explosions that could wreck reactor cooling systems, the continuing lack of realistic post-accident evacuation plans, including sheltering in place, for residents around plants, and the extension of operating licenses beyond the set 40 years, under what were only supposed to be exceptions. While there is a robust global debate on the potential safety impact of the 20-year life extensions – with experts saying that they are safe, Japan hasn't



set out clear reasoning on why the rule appears to be honored more in the breach than in actual practice.

Restarts and Trust (or the Lack Thereof)

Despite the regulatory reforms and plans by utilities to spend \$50 billion-plus on safety upgrades, the prospects for Japan's restarting a significant proportion of its downed reactors are poor.³ Prospects for new construction and replacement are grim too. Lingering opposition from the public and some politicians in host communities accounts for most of this. An unending litany of scandals, ranging from those at the "Keystone Cop" level to potentially deadly serious, continues to feed into this distrust.

Two-thirds of Japanese want either an immediate or a gradual termination of the use of nuclear power, and the most frequently cited reason for that desire is concern about safety. Nuclear proponents, especially outside of Japan, claim that the opposition results from the political leanings, ignorance, or irrationality—or a combination thereof—on the part of the public and the media.

Before Fukushima, Japanese public support for the use of nuclear power was close to 60%. Unlike most other industrial economies, where views were more evenly split or majorities favored phasing that use out, Japan may well be a case where the industry and regulators destroyed the solid support nuclear power had with their own actions. Still, distrust of nuclear power in Japan has been high for the past two decades, despite previously high support for it—which may be linked to the continuing collapse in support for the use of nuclear power since Fukushima.

According to a study in an in-house journal of the Atomic Energy Society of Japan, 71% of survey respondents in 1998 said that they didn't trust the government or utilities to release "truthful information" to the public about safety issues at nuclear plants. ⁴ That jumped to 84% nearly a year after the 2011 Fukushima accident, up from the relatively high level of 59% in 2010. ⁵ That question was added to the journal's regular survey after the highly publicized cover-up of a 1995 accident at the Monju experimental fast-breeder reactor. ⁶

And while the government has lifted mandatory evacuation orders for most of Fukushima, limited areas may remain no-go zones for generations. The prefecture has recovered the physical infrastructure like roads, schools and rail lines and to a certain extent shops, workplaces and hospitals, only a fraction of the population has returned. For example, in the town of Namie, which was heavily contaminated by one of the radiation plumes after the accident, only 1,600 of the original 21.500 residents have returned.

The largest proportion of people coming back are middle aged and older - or retired. But younger people, especially those with children, haven't returned after building new lives elsewhere in the past decade, concerns over and a real dearth of well-paying jobs - outside of cleaning up wrecked reactors and irradiated fields and homes, and their continuing concerns over radiation and the destroyed plant. So, while there are pockets of revitalized areas with new roads and buildings, a half mile away are fallow fields, shuttered stores and abandoned homes. The accident has accelerated the trend of hollowing out in rural areas in Fukushima, as younger people move to large cities to find work and the elderly remain—a situation similar to that in unaffected rural areas throughout Japan.

A decade after the disaster, nine reactors have been restarted. All of these are located in western Japan, and each uses a different type of reactor (pressurized water) than the one used in Fukushima (boiling water). Prospects



are slim for TEPCO's only remaining plant at Kashiwazaki-Kariwa to obtain an early approval to restart because of opposition from the governor (the previous two were also opposed) and the host prefecture of Niigata, in eastern Japan, and continuing scandals. In the most recent ones at that plant, the utility found that it had not completed construction on some 70 safety related projects, after announcing that had finished all safety upgrades, and security sensors to monitor for plant intrusions had been broken for an unknown length of time. In Fukushima, after the largest earthquake to hit Japan since 2011, the utility said that some seismic sensors at the wrecked Daiichi plant were broken.

Lessons Lost (Again)

In Japan's pandemic response, there are echoes of what led to Fukushima and the government's response to the nuclear disaster. The clearest example of the lack of a coherent strategy is that there are three separate ministers dealing with COVID-19: The health minister responsible for regulatory approval of the vaccines and testing; the regulatory reform minister charged with getting shots into arms; and the economy minister, who is tasked with bolstering growth, also overseeing the overall pandemic response.

So, not only is authority fractured but the last example of the economy minister is similar to the conflict of interest seen in one ministry both promoting and regulating nuclear power. (Japan at one point had five different agencies and commissions dealing with nuclear oversight too.) That's probably why Japan had—now suspended—national campaigns to subsidize domestic tourism and eating out during the global pandemic, not after the government had gotten it under control.

Equally important, Tokyo failed to learn from global best practices and the past experiences of regional neighbors like Taiwan, Korea, Hong Kong and New Zealand in how they changed their public health preparation and response systems, after struggling to deal with various respiratory disease outbreaks over the past two decades. Quickly implementing tighter border controls and a more thorough testing and contact tracing regimes for SARS-Cov-2 are some examples. Part of Japan's complacency stemmed from the fact that it hadn't been as severely affected by those past outbreaks of SARS-Cov-2, MERS-Cov and H5N1 bird flu.

Japan's monotone prime minister, Suga Yoshihide, known more for his penchant for pancakes than being proactive and decisive, said the games would happen regardless of the pandemic and noted that a Switzerland-based bureaucratic entity had the final say on them—not the sovereign state that he led and doled out billions of dollars to support the event. Those billions have nearly quadrupled to some \$30 billion from the initial cost announced in 2013.8

Underlying Domestic and Foreign Factors

Suga's term as LDP president, which carries the nation's top job because of the party's coalition majority in the Lower House, ends in September, and that chamber's term runs out in October, so he's betting the house on a successful Olympics bolstering his chances in both elections. For Tokyo, pulling off the games, especially with Northeast Asia rival Beijing hosting the winter games in February, without a coronavirus breakout is a matter of saving face.

Over the past year, Japan has been fortunate that the loss of life and numbers of sickened, in absolute and proportional figures, has been much lower than those in the U.S., Brazil, Russia and India. Though Japan's numbers are higher than those of neighbors like Taiwan and Korea, Japan was helped by a generally healthier population; universally available

healthcare; widespread acceptance of mask wearing; and a public willing to go along with soft lockdowns—at least until recently. (The last one mainly consisted of requests to stay home and restrictions on alcohol sales in bars and restaurants.)

Patience with, and most likely trust in, the government increasingly wore thin with the country being in a soft lockdown over much of the past year and a half, and the public started ignoring calls during the late spring and early summer to stay out of bars and eateries, just as new variants started to spread. Tokyo's fourth lockdown ran from July 12 to August 22 and August 17 that was extended to September 12. The contradiction of the government going ahead with the games and asking people to stay at home caused people to flout those requests. In other words, people became fed up with Tokyo's "do as I say, not as I do" attitude. Regarding the government response, 67% of the public is dissatisfied, according to a poll released by the liberal Asahi Shimbun newspaper in May, a near doubling since October.

And while Japan has tens of millions of vaccine doses on hand and in the pipeline, it didn't prepare for the massive logistics effort to get them into arms, despite knowing that a shot would be available sooner or later. That and rigid regulations and a powerful doctors' lobby, which are preventing other medical professionals like pharmacists from giving shots, has delayed vaccinations. Neither did Japan prepare for a potential explosion in cases-something it's experiencing now, whether because of people having become wary of taking protective measures or due to the emergence of new more virulent and deadly strains like the Delta variant or both, by setting up more hospital beds and securing more medical personnel.

Echoing the mantra that "nuclear power was absolutely safe," the Japanese government led

by Prime Minister Suga repeatedly stated that the games would be "safe and secure" because of steps like putting the games in a bubble and regular testing. That's despite not addressing issues like how to better protect the approximately 70,000 volunteers, many of whom were not vaccinated because of the very late decision to provide them with jabs. Originally, they were only offered two cloth masks and hand sanitizer. They still traveled between the venues and their homes, and the concern was that they could become disease vectors. Also unclear was how offering various exceptions for some 90,000 athletes, Olympic staff and executives and journalists coming from approximately 200 countries would prevent the spread of the coronavirus. Finally, Japan had vaccinated only about one fifth of its overall population with two shots when the games started on July 23,10 meaning that most of the public remained vulnerable. A month later, just ahead of the August 24 start of the Tokyo Paralympics, that was up to 34%. 11

One Japanese politician was prescient regarding the nation's inability to learn lessons. The LDP's then-policy chief Ishiba Shigeru, who set up the panel to investigate the party's responsibility for the Fukushima nuclear disaster and its energy policies, stated in 2013, "Someone once said that 'the lesson of history is that we fail to learn from history.' I don't want that to happen." 12

Neither should we.

References

Bonner, S., Brown, A., Dolezal, N., Franken, P., and Moross, J. (2016) 'Safecast: successful citizen-science for radiation measurement and communication after Fukushima', *Journal of Radiological Protection*, 36(2) [Online]. Accessed: June 14, 2021.



Brown, S.A. (2021) 'The Closely-Watched Case of Iitate Village: The Need for Global Communication of Local Problems' in Cleveland, K., Knowles, S.G., Shineha, R. (ed.) Legacies of Fukushima: 3.11 In Context. Philadelphia: University of Pennsylvania Press, pp.197-210.

Iitate Village. (2021). 2021-06 -01 Genzai no hinan jōhō [2021-06-01 Current evacuation information] [Online]. Accessed: June 14, 2021.

Madei Garden Village Co., LTD. (2019). Michinoeki Madeikan English Guide [Online]. Accessed: June 14, 2021.

Odaka Pioneer Village. (2020). Odaka Pioneer Village [Online]. Accessed: June 14, 2021.

Safecast. (2021). Safecast [Online]. Accessed: June 14, 2021.

Safecast (2021). SAFECAST 10 - Live from Fukushima, Around the Globe [Online]. Accessed: June 14, 2021.

Safecast Map (2014). Safecast Map [Online]. Available at: https://map.safecast.org/

(Accessed: 14 June 2021)

Safecast TV. (2021). How's The Food? - With Yoichi Tao - SAFECAST 10 v02 [Online video]. April 7. Accessed: June 14, 2021.

Suganuma, E. (2020) 'Priest trained in nuclear physics to lead village hit by 2011 disaster', The Asahi Shimbun, 26 October [Online]. Accessed: June 14, 2021.

The Great East Japan Earthquake and Nuclear Disaster Memorial Museum. (2020). The Great East Japan Earthquake and Nuclear Disaster Memorial Museum [Online]. Accessed: June 14, 2021.

Yamakawa, T. (2020) 'Fukushima ītatemura sansai no seshiumu osen wa ima (2020-nen haru)' [Fukushima/Iitate Village wild plants are contaminated with cesium now (Spring 2020)], Tokyo Shimbun, 27 May [Online]. Accessed: June 14, 2021.

ZDFheute. (2021). Fukushima zehn Jahre nach der Katastrophe [Online video]. February 2. [Online]. Accessed: June 14, 2021.

This article is part of the **The Special Issue: Legacies of Fukushima: 3.11 in Context.** Please see the Table of Contents.

James Simms is a freelance journalist and columnist in Tokyo, including for Forbes, Financial Times, Inside Climate News and Monocle and Japanese print and television, and has covered Japan's politics and economy for over two decades. From 2013, he spent a year at the University of Colorado Boulder on a Scripps Journalism Fellowship. For 15 years, he was Tokyo correspondent for The Wall Street Journal and Dow Jones Newswires, including a tenure as the Journal's Heard on the Street columnist analyzing corporations, policy issues and the economies in Japan and South Korea. As a Scripps Fellow, his research focused on Fukushima-related issues: Energy policy, especially renewable energy and nuclear power; seismology and seismic engineering; and disaster planning and mitigation.



Notes

- ¹ "Gorin 'Chushi' 43%, 'Sai-enki' 40%, Asahi yoron chōsa ('Cancel' Olympics' 43%, 'Delay Again' 40%, Asahi Opinion Poll)," *Asahi Shimbun*, May 17, 2021.
- ² Selina Wang and Diksha Madhok, "Top Japanese CEO says hosting the Olympics amounts to a 'suicide mission,'" *CNN Business*, May 15, 2021.
- ³ "Datsutanso dengen, 6-warishiya ni genpaku wa sanjūnendo 2-wari iji jitsugen e kuni no shudō fukahi (Decarbonized Power Generation: National Direction Needed to Maintain 20% Nuclear Power to Hit 60% Target)," *Nihon Keizai Shimbun*, May 13, 2021.
- ⁴ Kitada Atsuko, "Keizoku chōsa de miru genshiryoku hatsudensho ni taisuru yoron chōsa, Kako 30-nen to Fukushima genshiryoku hatsudensho jikogo no henka (Public Opinion on Nuclear Power Generation Measured in Continuous Polls, Changes After Fukushima Daiichi Nuclear Power Plant Accident over the Past 30 Years.)" *Journal of the Atomic Energy Society of Japan*, June 19, 2013.
- ⁵ Kitada, 2013.
- ⁶ Kitada, 2013.
- ⁷ Namie Town, Fukushima Prefecture, "Hajimete no kata: Sugu wakaru Namie Machi" (For First-Time Visitors: Quickly Understanding Namie Town)." Accessed July 12, 2021.
- ⁸ Stephan Wade and Mari Yamaguchi, "Tokyo Olympics say costs \$12.6B; Audit report says much more," Associated Press, December 20, 2019.
- ⁹ "Asahi Shimbun yoron chōsa-shitsumon to kaitō (Gogatsu jūgonichi, jūrokunichi) (Asahi Shimbun Public Opinion Poll, May 15, 16)," *Asahi Shimbun*, May 17, 2021.
- ¹⁰ Japan Government Chief Information Officers' Portal, Shingata korona wakuchin no sesshu jōkyō (Ippan sesshu (kōreisha fukumu)), (Status of Novel Coronavirus Vaccinations (Regular Vaccinations, including Elderly)).
- ¹¹ Ibid.
- "Kono kuni to genpatsu: Daihachibu, Jimintō, futatabi-1 kakuryō saikuru no minaoshi, tokumeii 'teigen' (sono 1) (This nation and nuclear power: Article No. 8, the LDP again/The special commission's 'proposal' to reevaluate the nuclear fuel cycle (part 1))." *Mainichi Shimbun*, April 4, 2013.