Japan's nuclear crisis spark nuclear concerns in China

Chinese Premier Wen Jiabao clearly knows that Japan is a neighbour China can not ignore. Wen was quick to offer assistance to Japan for its efforts to deal with earthquake and Tsunami and also visited Fukushima in late May.

Chinese public watched over TV the calm and civilized response of ordinary Japanese citizens in the face of major crisis. It is also the first time that Japanese self-defence troops were featured in Chinese TV channels as a mobilized force to engage in rescue and humanitarian efforts, similar with what they saw about China's own army during the time of need.

Undoubtedly, the Fukushima nuclear crisis has had an enormous impact on China. With a large Chinese population living and working in Japan, the Chinese government and a great many Chinese citizens have been keeping a close watch on the unfolding events.

On March 16th, the Chinese government held a high level State Council meeting to discuss the Japan nuclear crisis and to consider China's own nuclear planning. At the meeting, the government made three major decisions on nuclear power. Firstly, the government decided to halt its plan to build new nuclear power plants. Secondly, it ordered a re-examination of the safety risks of nuclear power stations currently under construction. Any safety faults discovered will lead to construction being stopped. Thirdly a decision was made to enhance the management of safety aspects of nuclear power stations currently in operation in China. China will also step up its process of drafting nuclear safety planning and adjust its middle and long term nuclear development plan. Any new nuclear plan will be shelved, including preliminary work.

Nuclear Crisis Unfold

Fukushima nuclear crisis is a lessen China learn live in modern history. China first nuclear reactor started to operate in 1991. The Chernobyl accident in 1986 and Three Mile Island in 1979 ccurred before China operated its own nuclear power plants. It occurred also at the time when China was largely cut off from international communities and when news was less timely. Therefor, since nuclear industry took roots in China, it has not experienced a crisis vividly being reported to Chinese audience like the Fukushima accident.

Also, given its geographic proximity, Chinese government and the public keeps a close watch on the developments of the crisis. In late March, major cities in China experienced a rush to buy salt as people believed the salt could prevent them from harmful impacts of nuclear radiation. The panic among the public was widespread.

Chinese Governmental Responses

While China is facing many social, economic and environmental challenges of its own, Chinese government understand any outside events, such as Arabic Spring revolution or nuclear crisis in Japan could become a spark of fire on the dry hay to create instability in Chinese society.

Therefore, Chinese government repeatedly assures Chinese public that Fukushima nuclear accident would not have actual radiation impact on China. And China's nuclear facilities are all safe and better managed then that of Japan.

The Fukushima accident undoubtedly provides China with a window of opportunity for better understanding the complexity of nuclear-power technology, as well as its potential effects.__

<u>In China, Now-eleven+11</u>_nuclear-power plants are connected to the <u>power</u> grid. Wang Yuqing, former <u>environmental</u> vice-minister_<u>of the Ministry of Environmental Protection</u> reminded the importance of proper supervision during China's nuclear-power development, "the training of supervision staff members cannot be completed in a short time." In reality, nuclear-power stations do not always comply with state standards and misconducts in procedures is not uncommon in almost every industrial sectors. It would be unrealistic to think China's nuclear sector is totally immune.

Chinese local governments still keep their strong desire for nuclear power even they are aware of seriousness of Fukushima crisis. The desired investment generated shadows the concerns over long term nuclear safety, costs for maintenance and future de-commission costs. More electricity is also essential to attract production lines and other energy intensive industries.

Due to such craze for nuclear power, geographic features are ignored during flexibility assessment. For example, Hongyanhe nuclear power plant in Liaoning province is being built on earthquake fault line in eastern China and around a new development zone which sea water has been severally polluted and oil leakage from shipping vessels often occurred.

The prospect of slowing down the entire sector is not optimistic. It is at best would remove the list of some inland nuclear power plants which are also challenged by the shortage of water. The more recent drought occurred in April and May in Southern China again demonstrates the inland nuclear power plants is rather an unrealistic plan. Nuclear power plants built inland generally use river water for cooling. In these instances, and nuclear accidents may lead to the pollution of water supplies to the region where population is dense..

Besides, China has not started to look at the costs of decommission as none of its nuclear reactor has reached to this stage. While the promoter of nuclear power tended to downplay this costs, but if it is not addressed from the very beginning, very likely the costs will eventually paid by the governmental, thus tax payers, rather than by the nuclear <u>industrycompany</u> who benefitted from the nuclear business.

Chinese Media Frenzy

Due to the fact that this is a nuclear crisis in Japan, Chinese media were allowed to report freely. Such a rare media freedom for coverage of nuclear issues offers a rare opportunity for Chinese media to introduce concerns over nuclear power and its related hazards and risks. Though some nuclear specialists, indeed most of them, are supportive of nuclear power, were invited to give comments on television programs; as a result, mounting concerns amongst the general public have emerged, largely making clear that they would rather not have nuclear power at all.

The Chinese language newspaper *Southern Metropolitan Daily* also published a map outlining names and locations of all proposed Chinese nuclear plants, plants under construction, and those in operation. This is the first publicly released information on China's nuclear industry and planning. For the first time the Chinese public is able to know about many of these new nuclear plants and their locations. These revelations will surely generate a huge outcry and opposition from the public.

Caijing magazine also published a special edition on China's nuclear development and

reexamined the China's nuclear policies and management challenges. But such hot debates did not last long as Chinese government quickly suppressed the criticism on China's nuclear plan and concern over China's various nuclear faculties.

Rivalry Between Hydro Power and Nuclear Sectors

While most power companies are state owned ones, debates on nuclear power exist for a long time within Chinese government. Hydropower lobbyist and the alike have criticized China nuclear power sector as "falling into a trap of American and French nuclear sales". They are quick in using Fukushima crisis as new reasoning for more state investment and favorable policies on hydropower sector instead of nuclear power.

As such a controversy escalated in intensity after Fukushima nuclear crisis, hydro power sector advocate that China has sufficient hydro technology to employ and can also export its business overseas. –Chinese hydrologist openly criticized China nuclear sector to embrace US and French interests as helping these western companies with their nuclear sales.

Nuclear advocates however publicise nuclear power as a clean and new energy and generate less ecological threats and do not need to relocate sizeable local residents which was seen in many dam projects.

While investments in nuclear construction are high, local governments in China are strong advocate for their nuclear power projects and and often use tactics of hijacking -- that is to ask for more funds, either bank loans or governmental investments, by threatening the loss of initial investment; or to force government to approve their nuclear plans by claiming potential financial loss of preliminary investment.

Chinese NGO Response

Chinese environmental group Green Earth Volunteers organized a journalist salon which included a briefing from a nuclear safety official Zhao Yamin on China's nuclear development on March 16th. The event drew a large audience. Many journalists and attendants raised sharp questions over China's nuclear power plan and safety measures.

On March 25th, the Heinrich Böll Foundation organized a seminar in Beijing, aiming at briefing Chinese journalists on nuclear safety issues. On April 26th, upon 25 year anniversary of Chernobyl disaster, a local NGO Blue Dalian organized nuclear awareness activities at different campuses in Dalian and an evening candle visual activity to commemorate the tragedy. The activities have drawn official attention from Liaoning provincial government and subsequently, a number of student activities have been interrogated by their respective university authorities on their motivation and social links.

—A think-tank NGO in Hong Kong Civil Exchange has engaged in activities to raise "nuclear literacy" in Hong Kong and also help civil society in Hong Kong to discuss and debate the issues surrounding nuclear energy as a part of Hong Kong's current fuel mix.

Topics such as "how would a major nuclear incident be handled in Hong Kong?"

——Chinese netizens have also been active in highlighting potential risks of nuclear power plants under construction or planned. For example, netizens in Dalian discovered Hongyanhe

nuclear power plant in Liaoning province is built on Tan-Lu fault line. Such facts have not been mentioned before in official documents or public media.

What Will be the Next?

China is unlikely to abondon its nuclear power strategy. But it would slow down the process of building inland nuclear reactors. Current drought in southern China demonstrate, due to lack of water supply, inland nuclear power plants is less realistic. High population density is another unfavorable factor.

As Chinese government has also been quick in crackdown any small indication of opposition which might lead towards an anti-nuclear campaign, as shown by its over-reaction on Dalian student's efforts in raising nuclear awareness.

As Japan is still struggling to solve its current nuclear crisis and debate on the country's future nuclear policy, the results will inevitably have an impact on China's own nuclear plan.

by Wen Bo, Senior Fellow of Pacific Environment <u>www.pacificenvironment.org</u> and China advisor of Global Greengrants Fund <u>www.greengrants.org</u>
He can be reached at savechinaseas@163.com

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