The Unknown on the Doorstep:
Hong Kong’s fears concerning Daya Bay, China’s first major nuclear power station
and the Public Relations challenges

by

Albert Chan,
Assistant Public Affairs Manager of Hong Kong Nuclear Investment Co Ltd

January 1995
1. Background

The Guangdong Nuclear Power Station at Daya Bay is located east of the Shenzhen Special Economic Zone in Southern China. It is a joint venture between Hong Kong's electric utility, China Light & Power Co Ltd and various Chinese partners including the China National Nuclear Corporation and the Ministry of Electric Power.

China Light & Power, through a subsidiary, Hong Kong Nuclear Investment Co (HKNIC) owns 25% of the twin 985 MW nuclear power station while Guangdong Nuclear Investment Co owns the remaining 75%. China Light & Power have an agreement to acquire 70% of the electricity output from Daya Bay for the Hong Kong grid, while the balance will be taken up by the Guangdong Province.

In terms of construction schedule, budget and performance, Daya Bay ranks amongst the best plants anywhere. This achievement is even more apparent when one takes into account the fact that Daya Bay is the first major nuclear power station in China and that a large amount of interface and co-ordination is required to bring together French and British technologies in a non-English speaking environment.

This Paper addresses the varied and challenging public relations issues faced by Daya Bay during the last 15 years (from feasibility study stage).

2. Phase One (late 1970s to mid-1980s) - Daya Bay viewed as confidence booster

The Guangdong Government indicated to China Light & Power in 1979 for the first time that it was interested in jointly developing a nuclear power station in the province with electricity supplied both to Guangdong and Hong Kong. A feasibility study ensued and concluded in 1980 that such a proposal was sound in principle. Detailed negotiations followed and continued until 1983 between China Light & Power and the Chinese authorities, and between China Light & Power and the Hong Kong Government. Finally, a joint venture contract was signed in early 1985 following formal approval from both the Central Government in Beijing and the Hong Kong Government.

The negotiation for the Daya Bay nuclear power station project coincided with the political negotiations between China and Britain over the future of Hong Kong - the 1997 issue. (The political negotiations commenced in September 1982 and concluded in late 1984). The Daya Bay project was seen at the time as a symbol of joint cooperation between the Chinese Government (the country's first nuclear power plant) and the British Government (GEC being a key equipment supplier) for the long-term (20-year contract between China Light & Power and the Chinese partner) benefit of Hong Kong (secure and reliable power supply to Hong Kong at a relatively stable price). The signing of the joint venture contract in January 1985 - one month
after the signing of the Sino-British Joint Declaration on the future of Hong Kong - was considered by many as "icing on the cake". In short, the power plant project was a confidence booster for Hong Kong which had suffered from a confidence crisis during the course of the political negotiations between 1982 and 1984. The project could not have been possible, many believed, without the full commitment and long-term confidence (in Hong Kong's future) from the British, Hong Kong and Chinese Governments as well as the private sector (i.e. China Light & Power).

Concerns over the nuclear project were heard during this phase but were limited to local environmental groups rather than the general public. The focus was more on the environmental and radiological impact of a nuclear power station than specific technical and safety issues. As for the general public, the project wasn't much of an issue ... until April, 1986.


3.1 Anti-nuclear campaign and public jittery

This was the period of construction of the Daya Bay nuclear power station. The Chernobyl accident in April 1986 was a watershed in the shaping of Hong Kong public opinion on nuclear energy and the Daya Bay project. An anti-nuclear campaign was launched by a few local activists who claimed to have collected signatures from one million people in Hong Kong urging the Chinese Government to shelve the project. Debates were heated and at times emotional in the press on the pros and cons of Daya Bay. Issues were often politicised as "anti-Daya Bay" was labelled by some as "anti-China". The general public overwhelmingly believed that the nuclear power station (50 km from Hong Kong) was too close for comfort - and for a good reason: Chernobyl showed that radiation knows no boundary. If an accident in Ukraine can impact on Western Europe, Daya Bay can bring an end to the whole of Hong Kong, many thought. With over 6 million residents living in Hong Kong which is surrounded by the sea, the prospect of evacuation was simply unthinkable.

The Hong Kong public did not understand the difference between Chernobyl-type and PWR-type nuclear reactors (Daya Bay is equipped with PWRs) nor were they aware that even in the case of Chernobyl, only residents within 30 km needed to be evacuated. These rational arguments and facts could not compete with the horror stories and news photos appearing in the news media on the worst nuclear disaster. What the public did realise was that Chernobyl occurred partly as a result of poor regard for safety in a Communist country. In that respect, the People's Republic of China and Daya Bay for that matter suffered a much more severe blow than a similar plant in the west. The poor safety record of China's civil aviation and all the other negative attributes of
Communists rule over China (the Cultural Revolution, alleged widespread corruption, secrecy etc) only added to the mistrust of the Hong Kong public towards Daya Bay.

3.2 Public education campaign

a) The PR challenges

The Daya Bay project presented a unique PR challenge for China Light & Power (and HK Nuclear Investment Co) for two reasons: First, we (a private company established in Hong Kong) are only a minority shareholder (25%) of the plant although we are the main consumer of nuclear power (taking 70% of the output). Secondly, the plant is located in China, not Hong Kong. Pressure from the public (either to stop the project or their demand for full disclosure of details of the project) came from Hong Kong, not China. As a minority shareholder, we have to be sensitive not to take up the role as the spokesmen for the project otherwise we may risk damaging our relationship with our Chinese partner. In reality, however, we have to defend the project in public all the time. The concern of the public has less to do with the technical aspects of nuclear plants (many do realise that Daya Bay uses imported technology and equipment) but more to do with scepticism of and lack of confidence in China. It was almost as if a private company in capitalist Hong Kong (under British colonial rule) were taking up the burden of changing the perception of the Hong Kong public towards a communist country.

b) Targeted public education rather than mass advertising

In the aftermath of Chernobyl and against the above background and restraints, we have gone for targeted public education as our main strategy for nuclear PR. The resulting change in public perception was slow but impactful. Typical programmes include visits to the nuclear power plant (by invitation) which involve certain logistical problems because visitors have to go through immigration/customs formalities (non-Hong Kong residents need a visa) just to go to Daya Bay. The situation is very much different from a utility company in the west opening its door to the public to visit their nuclear plant anytime any day.

We have also staged exhibitions in shopping arcades, given presentations to secondary school students (aged between 13 and 18) and published a wide range of leaflets and pamphlets for distribution to opinion leaders, the media, visitors to the plant, professionals
(teachers, architects, nurses, lawyers, engineers etc) and students. Our experience tells us that the most effective means of getting our message across was to visit the plant, including a slide presentation and a tour of the exterior of the site as well as the full-scope control room simulator. But due to the complications involved in arranging a group visit (manpower and resources implications), the number of people from Hong Kong who can take part in such visits is limited to roughly 3,000 per year.

We have also produced a 13-part video documentaries (5 minutes each) and put them on TV as paid commercials. This year, we’ve opened a Nuclear Information & Exhibition Centre in urban Hong Kong which is an alternative to going on a trip to the Daya Bay plant.

In summary, we have implemented since 1987 a public education programme that is clearly different in tone and style from a nuclear promotional campaign which is more commonly seen in some western countries. We aim not at promoting nuclear (at least on the surface) but providing hard facts about nuclear and we let the audience make their own judgements. The choice of our targets (students, their teachers, the media and professionals) was made based on our assumption that they are the ones in our society who are relatively open minded and are prepared to listen to us. One of the difficulties we encounter is the lack of interest of many people in Hong Kong in the subject which is basically dry and technical for the laymen (interest level would rise sharply in the wake of any adverse news about nuclear or Daya Bay such as Chernobyl but that sort of interest always failed to sustain for very long).

4. Phase 3 - Post commissioning (1994 to present)

Unit 1 of Daya Bay entered into commercial operation in February 1994 and Unit 2 three months later. Unit 1 has experienced several shutdowns during its first year of operation though none of these were nuclear safety related. Most of the problems occurred in the conventional part of the power station as is the experience in France. However, since this is the first time the Hong Kong public has had a nuclear power station on its doorstep, any trivial incident (which would be ignored if it occurred at a coal-fired power plant) becomes headline news.

There were 8 automatic shutdowns during the first year of operation but none were significant in terms of nuclear safety. If for instance a technical fault occurs on the conventional part of the plant which does not affect nuclear safety, the operator at Daya Bay does not see the need to inform the residents nearby (i.e. mainland Chinese nationals) - let alone those living 50 km away - i.e. Hong Kong residents. On the
other hand, the public in Hong Kong (especially the media and politicians) insist on being told of all such shutdowns as soon as they occur. It has taken us considerable effort to convince Daya Bay management that for PR purposes, we should be seen to be as open as possible and that the prompt release of information is essential to achieve this. Since it sometimes took a few days to a few weeks before a technical problem was clearly understood, the Daya Bay operator would inform the Hong Kong public of such shutdowns after having been able to establish the full details. We, as a part owner as well as the operator, have been criticised for “delaying” the release of information under those circumstances.

The several shutdowns brought about a series of critical news articles on Daya Bay in the local English media in August and September 1994 (several months after commercial operation). These have resulted in considerable damage to the image of the nuclear plant. The public seemed to be all the more convinced that China is incapable of running a nuclear power station safely whenever they read from the press that “Daya Bay shutdown again”. China Light & Power has also been adversely affected by virtue of its involvement in it. One of the leading stocks analysts Merrill Lynch published a report in early August in which the risk factor of China Light & Power was raised in response to the growing concern for safety at the nuclear plant.

Even without the latest round of negative publicity, there is real concern among the Hong Kong public (including the media, investment community and the general populace) regarding the safety of Daya Bay. Much of that was due to inadequate knowledge of nuclear energy and the safety aspects of Daya Bay (hence the public education programme); but the crux is the lack of confidence in China’s capability to manage the plant, and the fear that China would hold back information about problems of the plant particularly in the event of a nuclear accident.

This concern was further exacerbated by the fear of the unknown - the average person in Hong Kong does not know what would happen to the territory and what he or she should do if a nuclear accident occurs. In fact, the Government has spent some effort in publicising its contingency plan (i.e. what the 29 different departments will do in case of an accident) but obviously it needs to do more to inform the public about what they should or should not do in such situations.

The agreed objective now - during the post-commissioning phase - is to make Daya Bay a non-issue by projecting the plant’s image as open and as transparent as possible. This will be achieved by increased frequency of press briefings on Daya Bay, publication of updates on the plant’s performance and radiological and environmental monitoring data.

We have also proposed to the Hong Kong Government the need to effectively communicate to members of the public the contingency measures in Hong Kong in case of a nuclear accident. Although we appreciate that residents living 50 km away
from a modern PWR nuclear power station need to do nothing even in the worse case scenario, the majority of the people in Hong Kong would not find it acceptable if the Government simply tells them not to worry. There are elected legislators who even call for drills for mass evacuation and there are those who worry about getting their first air tickets out of the territory when the plant goes wrong.

5. Conclusion

As the cliche goes, action always speaks louder than words. It is our belief that, with time, people in Hong Kong will come to realise that Daya Bay is not a threat to the territory, and that they are actually benefitting from the long-term economical cost of nuclear electricity and the cleaner air by burning less coal in Hong Kong. It may however take years of safe operation for us to make a convincing case and I look forward to reporting the progress of our PR work and the changing perception (changing for the positive, I hope) of the Hong Kong public in a future PIME Conference.

END