LC Paper No. CB(2)1091/11-12(01)

香港特別行政區政府 保安局



The Government of the Hong Kong Special Administrative Region Security Bureau

香港添馬添美道2號

2 Tim Mei Avenue, Tamar, Hong Kong

本函檔號 Our Ref.:

來函檔號 Your Ref.:

14 February 2012

Mrs Sharon TONG
Clerk to Panel
Legislative Council Secretariat
Legislative Council Complex
1 Legislative Council Road
Central, Hong Kong
(Urgent by fax: 2185 7845)

Dear Mrs TONG,

Panel on Security

At the meeting on 6 December, Members discussed the review proposals of the Daya Bay Contingency Plan (DBCP) and enquired about Emergency Planning Zones (EPZs) and food supply during an emergency. We would like to provide supplementary information as set out below.

EPZs of the DBCP

Members enquired about the Administration's preparedness for possible evacuation up to a 30 km radius from Daya Bay.

As reported in the latest Panel papers¹, the International Atomic Energy Agency (IAEA) recommends an Urgent Protective Zone (UPZ) to plan for evacuation, sheltering and distribution of thyroid blocking agent. The exact size of a UPZ around a specific nuclear facility is subject to site specific analysis of the risk and practical circumstances. The radius of the UPZ may fall somewhere within a range from 5 to 30 km. In fact, most, if not all, of the jurisdictions we come to know have set the radii of the UPZ as not more than 20 km. The prevailing 20km-EPZ1 arrangement in the DBCP has been reviewed critically with renewed and up-to-date risk considerations and parameters in our ongoing review

Annex C to LC Paper No. CB(2)224/11-12(01) of November 2011 and paragraph 8 of LC Paper No. CB(2) 447/11-12 (06) of December 2011.

exercise, taking into account the lessons learned from the Fukushima nuclear incident.

In the case of Hong Kong, we have critically reviewed the risk assessment of the nuclear power stations in Daya Bay. As explained in the Panel paper that Members discussed in December 2011, we found no material or significant changes that justifies a fundamental change of the original conclusion or the present EPZ arrangements in the DBCP. We consider it scientifically justified and appropriate to maintain a 20 km radius for EPZ1 for plume exposure countermeasures (e.g. evacuation, sheltering and use of thyroid blocking agent). This arrangement is in line with the prevailing IAEA standards and best practices in advanced countries.

We wish to underline that in nuclear emergency planning, the key is to cover a range of reasonably foreseeable (including remote but conceivable) scenarios for prioritising deployment of defined resources and the planning details should be proportional to the degree of the risks assessed. Detailed pre-planning of protective actions to a reasonable extent would provide a useful basis in expanding the scope to handle an accident with wider implications if happened².

Indeed, other parts of Government's Emergency Response System, like the Natural Disaster Contingency Plan, could be made use of to support implementation of the DBCP. Under the Natural Disaster Contingency Plan, evacuation is one of the emergency response measures envisaged. Various evacuation operations have been successfully conducted in previous incidents, including one involving two thousand families owing to torrential rain and landslide in 1994, which far exceeds the number of households living within 30 km from Daya Bay in the area in Hong Kong. This demonstrated the Government's capability to evacuate affected residents where necessary.

As reported earlier³, IAEA and many countries using nuclear energy are undertaking reviews of nuclear safety standards, emergency planning and nuclear plant regulation with results pending. We will closely monitor any new standards that may be promulgated by IAEA, State Council and other advanced countries following completion of their

See paragraph 3 of the Panel paper of December 2011. Details of basic principles for nuclear contingency planning as generally accepted by the international community can be found in Annex A to it.

Paragraphs 9-11 of the Panel paper of November 2011and paragraphs 6 and 18 of the Panel paper of December 2011.

review work, and update and strengthen different aspects of the DBCP to meet the latest national or international safety levels.

Food Supply during an Emergency

Members also enquired about the possible contamination of food produced in the Mainland in case of a nuclear accident in Daya Bay and possible impact on Hong Kong.

Over 90 percent of Hong Kong's food supply is imported. The Mainland is our most important source of food supply, especially for fresh food items. In our letter of 19 July 2011⁴ in response to Members' enquiries, we explained the small proportion of food imported from places within 30km from the nuclear power stations. In our further review, we have updated the breakdown to cover the whole 50 km "Ingestion Emergency Planning Zone" of the Mainland around the nuclear power station at Daya Bay, tabulated as follows -

Sources of supply of fresh food and live food animals (2010)⁵:

Type of fresh food and live food animals	Produced locally	Imported from the Mainland (from an area within 50 km from the nuclear power stations at Daya Bay)	Imported from the Mainland (other areas)	Imported from overseas
Vegetables (tonnes)	2.5%	18.9% ⁶	71.6%8	7%
Live pigs (heads)	5.2%	4.3%	90.5%	0%
Live cattle (heads)	0%	0%	100%	0%
Live goats (heads)	0%	0%	100%	0%
Live chicken (heads)	61.4%	5.3%	33.3%	0%
Live freshwater fish (tonnes)	3.8%	0%8	89.8%8	6.4%
Live marine fish (tonnes)	23.4%	11.5%		65.1%
Milk, milk products and frozen confections (tonnes)	27%	12.5%		60.5%

⁴ LC Paper No. CB(2)2433/10-11(01) refers.

The percentage of the local production and overseas imports of some food items has been adjusted in accordance with the latest statistics kept by AFCD and the latest available trade statistics for the year of 2010 released by the Census and Statistics Department respectively.

⁶ Estimation based on the distribution of sources as indicated in the accompanying documents of food consignments inspected at import level by the Centre for Food Safety.

The proportion of food imported from places within 50 km remains small. In the unlikely event of a nuclear incident, there will still be sufficient and stable supply of live and fresh food to Hong Kong, and its impact on the overall food supply to Hong Kong will be minimal.

Way Forward

We are most grateful to Members for the comments and observations made at the meeting which are instrumental to our review. Based on the review outcome, we are updating the bilingual text of the DBCP with a view to issuing a revised version shortly. Members will be kept posted.

Yours sincerely,

for Secretary for Security