

香港特別行政區政府
保安局



The Government of the
Hong Kong Special Administrative Region
Security Bureau

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1 February 2017

Ms Betty Ma
Clerk to Security Panel
Legislative Council Complex
1 Legislative Council Road
Hong Kong

Dear Ms Ma,

Re. Letter from Hon. Kenneth Leung

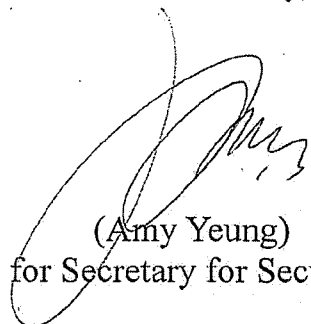
Thank you for your letter dated 10 January. Our reply to the questions raised by Hon. Kenneth Leung is as follows —

Since 2015, we have received a total of seven notifications issued by the Nuclear Emergency Committee Office of the Guangdong Province (GDNECO) on licensing operational events (LOEs) of the nuclear power stations in the Guangdong Province. All the notifications were issued within two working days or 72 hours (applicable to public holidays) after confirmation of the events, in accordance with the notification mechanism. Details of these LOEs are at the Enclosure. According to the International Nuclear and Radiological Event Scale of the International Atomic Energy Agency, these events were classified as “Below Scale Licensing Operational Events” (i.e. “Level 0” events), which have no effect on the safe operation of the nuclear power station, the health of the workers, the nearby public or the environment.

The notification mechanism is applicable to nuclear power stations in operation. Nuclear power stations under construction have yet to be

loaded with nuclear fuel or commissioned, and therefore do not pose any nuclear safety risk. Moreover, as stated in our reply dated 8 December, apart from the Daya Bay Nuclear Power Station (DBNPS), all other Mainland nuclear power stations are situated at least 130 km from the Hong Kong urban area. Based on general international standards, the risk posed by such nuclear power plants to Hong Kong even in case of a nuclear accident is far lower than that of DBNPS. The HKSAR Government and the Guangdong authorities have all along been maintaining contact on nuclear emergency issues through regular co-operation and communication channels.

Yours sincerely,



(Amy Yeung)
for Secretary for Security

**List of Licensing Operational Events at Nuclear Power Stations
with Notifications from PEACO/GD Received by Security Bureau in 2015-16**

Date of Event	Nuclear Power Station	Details of Event	Classification of Event
9/10/2015	Guangdong Nuclear Power Station (GNPS) at Daya Bay	The event concerned Unit 2 of GNPS. During inspection, station staff found that inside a room in the electrical building, the actuator of a fire suppression gas canister was not set at the operational mode and therefore could not be remotely operated. The other two identical canisters and the fire detection system in the room were operating properly. Subsequent inspection found the same situation at Unit 1. Rectification was made by the staff immediately and the relevant function was restored.	“Below Scale Licensing Operation Event” (i.e. “Level 0” event)
9/1/2016	Lingao Nuclear Power Station (LNPS) at Daya Bay	Due to climate and tidal variations, a large amount of minute marine organisms gathered at the seawater intake of Unit 2 of LNPS, blocking the rotary screen of the circulating water filter system and tripping two seawater circulation pumps of the unit. The tripping triggered an automatic protection signal at Unit 2 of LNPS which led to the safe shutdown of the reactor. The operators took relevant measures to arrange for scooping up the marine organisms gathered at the intake and cleaning up the rotary screen. Upon confirmation that the safety requirements were met, the unit was restored to normal working conditions.	“Below Scale Licensing Operation Event” (i.e. “Level 0” event)
2/4/2016	LNPS at Daya Bay	Unit 2 of LNPS was in normal operation when station staff who were working on a defect at the air-conditioning system of the electrical building caused an unplanned closure of four valves for the ventilation filter system. The staff concerned took immediate measures and restored the equipment to its normal standby mode within four minutes.	“Below Scale Licensing Operation Event” (i.e. “Level 0” event)

24/5/2016	LNPS at Daya Bay	Station staff observed during an inspection that the alarm function of a fluid radiation monitoring device for the cooling water system of Unit 3 of LNPS was disabled and could not display the relevant alarm signal. The staff restored the alarm function of the monitoring device at once. It was confirmed that, during the period in which the alarm was disabled, the device still functioned normally in taking measurements and displaying the data concerning cooling water for the equipment, while the functioning of other auxiliary monitoring alarm devices remained normal. Radiation level of cooling water was also found to be normal. Investigation revealed that the alarm function of the fluid monitoring device was disabled in the previous planned overhaul in compliance with the necessary plant criteria but was not duly restored.	“Below Scale Licensing Operation Event” (i.e. “Level 0” event)
4/10/2016	LNPS at Daya Bay	While Unit 2 of LNPS was undergoing a planned outage for overhaul, station staff found a deviation in the reading of a pool water level monitoring sensor during surveillance. The actual water level of the pool remained normal. Further inspection confirmed that station staff had incorrectly closed an isolating valve for the water level monitoring sensor when preparing for a maintenance activity. Immediate rectification was taken by the staff to re-open the valve and restore the normal function of the sensor.	“Below Scale Licensing Operation Event” (i.e. “Level 0” event)
22/10/2016	LNPS at Daya Bay	While Unit 2 of LNPS was undergoing a planned outage for overhaul, station staff identified a small fluctuation in the reading of the temperature monitoring sensor of spent fuel pool during a periodic test, and immediately suspended the test and switched to a redundant	“Below Scale Licensing Operation Event” (i.e. “Level 0” event)

		cooling circuit. Upon inspection, two valves at the initial cooling circuit were found closed during the test. Station staff immediately re-opened those valves. Measurements taken by the temperature monitoring sensor indicated that pool water temperature had remained normal and at a safe level.	
22/10/2016	GNPS at Daya Bay	While Unit 1 of GNPS was undergoing a planned outage for overhaul, station staff found during preparation for fuel unloading that one of the alarms for the nuclear reaction parameter measurement system was turned off and the other redundant alarm was fully functional. Investigation confirmed that the alarm had not been switched back on after completion of work by the staff an hour ago. Station staff immediately restored the function of the alarm.	“Below Scale Licensing Operation Event” (i.e. “Level 0” event)