CONTROLLING OFFICER'S REPLY

EEB(E)023

(Question Serial No. 1456)

Head: (42) Electrical and Mechanical Services Department

Subhead (No. & title): (000) Operational expenses

<u>Programme</u>: (1) Energy Supply; Electrical, Gas and Nuclear Safety

Controlling Officer: Director of Electrical and Mechanical Services (POON Kwok-ying)

<u>Director of Bureau</u>: Secretary for Environment and Ecology

Question:

The Electrical and Mechanical Services Department (EMSD) is responsible for monitoring the two power companies in Hong Kong. In January this year, there were two transient voltage dip incidents. It was mentioned that the EMSD provided technical support to the Environment and Ecology Bureau on matters relating to the future development in the electricity market and the implementation of the Scheme of Control Agreements. In this regard, would the Government inform this Committee of the following:

- (a) What is the specific technical support provided;
- (b) What is the role of the EMSD in the monitoring process; what are the staff establishment and provision reserved for conducting follow-up investigation on incidents; what is the average processing time;
- (c) In each of the past 3 years, how many incidents involving the power supply systems of the respective power company occurred?

Asked by: Hon LUK Chung-hung (LegCo internal reference no.: 21)

Reply:

- (a) The Electrical and Mechanical Services Department (EMSD) provides support to the Environment and Ecology Bureau (EEB) in the aspects of electrical technologies for monitoring the two power companies in Hong Kong (the power companies). The relevant tasks of the EMSD include assisting the EEB in the aspects of electrical technologies to conduct Auditing Reviews with regards to the technical, environmental and financial performance of the power companies, vetting the Development Plans of the power companies as well as carrying out interim reviews of the SCAs, in accordance with the Scheme of Control Agreements (SCAs).
- (b) In accordance with the Electricity Ordinance (Cap. 406) (the Ordinance), the EMSD regulates the operation of the power companies, conducts inspections of the power supply facilities concerned, and monitors the performance on the supply reliability and the electrical safety of the power companies. As regards electrical incidents, the EMSD has established a reporting mechanism with the power companies, requiring the power companies to report the voltage dip and power interruption incidents of their

power supply facilities. After an electrical incident occurs, the EMSD will take immediate follow-up actions, including instantly deploying staff to the site to conduct investigation so as to follow up on the development of the incident, as well as urging the power companies to complete the repair work as soon as possible. In addition, the EMSD will require the power companies to submit, as per the Ordinance, within a specified timeframe (4 weeks in general) after the incident, a report explaining the cause of the incident and stating the necessary remedial measures to be taken. Upon receiving the incident report, the EMSD will review if the investigation result in the report is well founded, suggest further improvement measures, and follow up on the power companies' implementation of the various improvement measures put forward in the report to prevent the recurrence of a similar incident. As the follow-up investigation of the incidents is part of the overall duties of the EMSD and is being undertaken by the existing staff establishment, we do not have a separate breakdown.

(c) According to the records of incidents reported by the power companies (namely the CLP Power Hong Kong Limited (CLP) and The Hong Kong Electric Company, Limited (HEC)) under the prevailing reporting mechanism, the numbers of voltage dip and power interruption incidents involving the power supply systems of the CLP and HEC over the past 3 years are as follows:

Nature of incidents	Number of incidents					
	2021		2022		2023	
	CLP	HEC	CLP	HEC	CLP	HEC
Voltage dip	2	0	8	0	9	1
Power interruption	8	0	11	1	7	3