Minutes of the 43rd Meeting of the Electrical Safety Advisory Committee (ESAC)

Date 1 November 2021

Time : 2:30 p.m.

Rooms A & B, Interactive Learning Centre, 4/F, EMSD Headquarters, 3 Kai Shing Street, Venue:

Kowloon, Hong Kong

Present

Ir Professor CHAN Kwok-cheung, Thomas (Chairman)

Mr PANG Yiu-hung

Ms WONG Yuet-ngo, Joey Ms CHEUNG Hai-man, Flora Ms LAU Wing-yan, Rikki

Mr TSE Chun-man

Ms YIP Kam-yee, Candy

Dr PUN Kong-pang

Ms SIU Zoe

Mr IP Sung-tai

Mr LEUNG Chun-kit

Dr LAM King-hang

Ir AU Tat-kay, Walter

Mr NG Lui-kai

Mr CHAN Chi-ming, Antonio

Mr CHEUNG Wing-ho

Mr LI Kin-shing Ir WAI Yip-kin

Ms YEE Sau-wah

(Secretary)

In attendance

Mr POON Kwok-ying, Raymond Deputy Director / Regulatory Services, EMSD Mr CHU Kei-ming, Barry

Assistant Director / Electricity and Energy

Efficiency, EMSD

Ms CHENG Pui-man Acting Chief Electrical and Mechanical Engineer /

Electricity Legislation, EMSD

Ms SIT Kin-ka Senior Electrical and Mechanical Engineer / Consumer

Installations 1, EMSD

Senior Electrical and Mechanical Engineer / Consumer Mr LAU Kai-chung

Installations 2, EMSD

Mr KWAN Siu-kin Senior Electrical and Mechanical Engineer / Electrical

Products, EMSD

Mr WONG Tsz-chung Senior Electrical and Mechanical Engineer / Nuclear

and Utility Safety, EMSD

Absent with Apologies Professor OR Siu-wing

Action

Agenda Item 1: Opening Remarks

- 1. The Chairman welcomed members to the 43rd meeting of the Electrical Safety Advisory Committee (ESAC). First of all, the Chairman introduced to members Ms WONG Yuetngo, Joey from the Home Affairs Department (HAD). Ms WONG succeeded Ms CHOI Wing-yee, Cornelia as the HAD representative to participate in the ESAC. Afterwards, the Chairman also introduced to members the officers of Electrical and Mechanical Services Department (EMSD) in attendance at the meeting.
- 2. When briefing members on the meeting arrangement, the Chairman specially reminded them that they must observe the guidelines for a one-tier reporting system related to the declaration of interests by members of advisory boards and committees. If a member became aware that a conflict of interests might arise from his/her participation in the discussion of an agenda item, he/she must disclose full details of the interests involved accordingly. The interests declared would be recorded in the minutes of the meeting.

Agenda Item 2: Minutes of the 42nd Meeting Held on 20 April 2021

3. Members did not raise any amendment to the minutes of the 42nd meeting or matters for follow-up. The Chairman declared the minutes of the 42nd meeting confirmed. The Secretariat would arrange to upload the minutes of meeting to the EMSD website for public reference.

Agenda Item 3: Overview of Electrical Safety for the First 6 Months of 2021 (ESAC Paper 03/2021)

- 4. The EMSD briefed members on the above paper. The paper presented an overview of the enforcement and promotional work on electrical safety in the first six months of 2021.
- 5. A member enquired about the reasons for the increase in the number of prosecutions against non-registered electrical contractors (non-RECs) for undertaking electrical works

despite the reduction in the number of inspections. The member further enquired whether the EMSD would take prosecution actions under the Electricity (Registration) Regulations against non-RECs for undertaking electrical works and if yes, the relevant penalty.

6. The EMSD responded that the number of inspections in the first six months of 2021 had reduced due to the epidemic. Nevertheless, the EMSD had been adopting a multipronged enforcement strategy. In addition to inspections, the EMSD would also carry out enforcement actions via other means such as reported cases, incident investigations, etc. If a non-REC was found to be undertaking electrical works, the EMSD would carry out investigation and take prosecution against those involved when sufficient evidence was available.

In addition, non-RECs undertaking electrical works would be prosecuted under the Electricity Ordinance. Pursuant to the Electricity Ordinance, it was a major offence for a non-REC to undertake electrical works, and the person shall be liable to a fine of \$50,000 and to imprisonment for six months on first conviction, and to a fine of \$100,000 and to imprisonment for six months on a subsequent conviction for the same offence.

- 7. A member enquired whether the STEM toolkits produced by the EMSD were in virtual or physical form and the specific details.
- 8. The EMSD responded that the STEM toolkits were physical tools that incorporated elements of electrical safety and to be used in workshops, so as to enhance children's understanding of electrical safety through participation in fun activities.
- 9. A member enquired about how the public could identify household electrical products that met the safety standards during the course of purchase and whether suppliers would provide information to facilitate the public to purchase household electrical products that met the safety requirements.
- 10. The EMSD responded that members of the public should purchase household electrical products that met the safety requirements from reputable shops. According to the Electricity Ordinance, suppliers must ensure that the household electrical products supplied in Hong Kong were issued with certificates of safety compliance. To facilitate the public to purchase household electrical products that met the safety requirements, the EMSD had launched a voluntary registration scheme, through which suppliers could submit the certificates of safety compliance of their household electrical products to the EMSD. The EMSD would upload the product brands and model numbers concerned to its website after checking for public reference.

Agenda Item 4: An Update on Periodic Inspection, Testing and Certification Work for Fixed Electrical Installations (ESAC Paper 04/2021)

- 11. The EMSD briefed members on the above paper. The paper reported the current situation, new initiatives and ways forward for further enhancing the quality and safety standard of periodic inspection, testing and certification (PITC) work for fixed electrical installations (FEIs) in premises.
- 12. A member from a power company expressed his recognition for the EMSD's publicity and education efforts targeted at property management companies and revealed that the company he worked for had recently liaised with the HAD, the District Councils and building associations on the matters of PITC for FEIs. The member suggested the EMSD to consider cooperating with the two power companies, owners' corporations and property management companies in the future to organise briefings or meetings, so that members of the owners' corporations, owners and even the elderly could understand the safety requirement of "switching off electricity supply before inspection". In addition, the maintenance of electrical installations by power companies could be carried out simultaneously to tie in with the PITC for FEIs of the buildings. In this way, occupants did not have to experience power suspension twice. However, it required negotiations between occupants and the power companies in advance, as well as the cooperation of the owners' corporations and property management companies.
- 13. The EMSD responded that the support and cooperation of power companies was valuable to promoting the PITC for FEIs. The EMSD had been committed to maintaining close cooperation with power companies to disseminate the message that electricity supply shall be switched off for the safety of carrying out PITC work for FEIs. The EMSD would also hold a seminar for property management companies in December this year to publicise the requirements for PITC for FEIs. At the seminar, the EMSD staff would also step up publicity on the power suspension arrangements of the two power companies.

Agenda Item 5: Any Other Business

14. A member said that upon knowledge of the electrocution incident that occurred in a subdivided unit (SDU) reported by the EMSD at the last meeting, he cooperated with a social welfare organisation in the Hong Kong East District and deployed more than 20 volunteers to visit 20 elderly singletons living in SDUs in September this year. During the visits, the volunteers used the Electrical Safety Checklist (the Checklist) prepared by the EMSD to inspect the FEIs in the SDUs. It was found that only 3 out of the 20 SDUs had up-to-standard FEIs. Of the remaining 17 SDUs, 6 SDUs were assessed by the volunteers

as potentially risky. Problems with FEIs in the units included the lack of residual current devices, distribution boards or separate miniature circuit breakers in the unit, lack of identification labels in the distribution board, frequent trips, loosened light switches/socket outlets, exposed conductors, etc., and some occupants also suspected to have experienced electric shock or felt numbness.

In light of the above, the member had met with representatives of the power company, workers union of the electrical trade and the EMSD to discuss the ways to identify resources and assist the elderly in solving their problems. After the meeting, the member had contacted the occupants of the SDUs assessed to be potentially risky, and received consent from 5 of them for another visit, pending the issuance of defect lists by the volunteer team for follow-up. As regards SDU occupants who had not consented to another visit, the member and the social welfare organisation would attempt to contact the relevant occupants again for another visit.

In another case, an old lady solved the problem of "intermittent on and off" of the television in her unit by securing the plug of her television with plastic tape. The member considered such practice potentially dangerous as a flashover might be caused if the conductors were loosely contacted, resulting in fire incidents. In addition, some old buildings were not required to install residual current devices when they were completed according to the requirements at that time. If a residual current device was to be installed, it might be necessary to replace the distribution board and redesign the circuit. The member said that due to various reasons and resource constraints, these problems could not be solved in a short period of time.

In addition, the member noted that some elderly people often visited the "Morning Bazaar" to purchase second-hand electrical products for use. In this regard, he had visited the "Morning Bazaar" in person and had seen some elderly people laying out dilapidated electrical products on the ground for sale. He suspected that these products were scavenged items and expressed worries that other elderly people might purchase such electrical products for use.

15. The EMSD thanked the member for his concern and proactive follow-up actions regarding the electrical safety of elderly singletons living in SDUs, as well as his report on the sale of second-hand electrical products at the "Morning Bazaar".

The EMSD had always attached great importance to the electrical safety of SDUs. In addition to regular inspections, the EMSD also launched extensive publicity efforts targeting owners and occupants of SDUs through owners' associations and social welfare organisations, with a view to raising the safety awareness of owners and occupants.

Occupants should request the owner to arrange, or arrange by themselves, registered electrical contractors to carry out works on any unsafe electrical installations as soon as possible. Regarding the situation just mentioned by the member, the EMSD had met with the social welfare organisation concerned to obtain accurate information and understand the crux of the problem. Meanwhile, the EMSD would like to obtain the addresses of the relevant premises from the social welfare organisation, so that it could deploy staff to the premises for on-site inspections. The EMSD understood that the social welfare organisation might not be able to provide the addresses as they involved personal information of the occupants. Therefore, the EMSD had deployed staff to inspect buildings with SDUs that were suspected to have serious electrical safety problems by way of door-to-door visits. Once occupants' consent was obtained, the EMSD staff would enter the units for inspection to identify potential electrical safety hazards in the units. If the EMSD staff was unable to enter the units, inspection notices would be issued to the units concerned.

The existing legislation did not empower the EMSD to enter the premises for immediate inspection. The EMSD was required by the legislation to notify the occupants in writing at least 14 days prior to entering the unit. In the past, the number of times the EMSD was able to enter the units and inspect the electrical installations was not high. In view of the above, the EMSD had prepared the Checklist and copies of which were distributed to SDU occupants with the aid of social welfare organisations, so that they could check their electrical installations. The EMSD's contact numbers were also provided in the Checklist. Occupants could contact the EMSD to follow up on any electrical installations suspected to be non-compliant or incomplete.

In addition, the EMSD was aware that many social welfare organisations and volunteer groups would visit SDU occupants. Therefore, the EMSD would like to take the opportunity to appeal to the relevant staff and volunteers to introduce the Checklist produced by the EMSD to occupants and the elderly living in SDUs during their visits, so that they would be aware of the items that have to be checked and paid attention to. At the same time, the relevant staff and volunteers could also assist the occupants and the elderly to check their FEIs and help to provide immediate solutions to some problems. Where appropriate, they could also refer cases to the EMSD for follow-up actions. Compared to stern enforcement actions, the above method provided a softer approach that should be easier to implement while solving the problems of the occupants and the elderly.

Regarding electrical products, the EMSD said that the supply of household electrical products in Hong Kong was regulated by the Electricity Ordinance and the Electrical Products (Safety) Regulation. The EMSD had always adhered to the risk-based regulatory

approach. In addition to stores selling new household electrical products in general, the EMSD also conducted special inspections on sales locations and stores of different forms, including stores selling second-hand household electrical products, night markets, "Morning Bazaar", etc. If suspected violations were found through inspections, report or incident cases, the EMSD would conduct investigations and take follow-up actions accordingly. In addition, the EMSD staff would also explain to the sales staff the legislative requirements during the inspections. As noted by the member, many of those selling second-hand electrical products in the "Morning Bazaar" were the elderly and the underprivileged, who might be unaware of the legal requirements for the supply of household electrical products. In view of the situation, the EMSD staff would make publicity efforts and educate them on the legal requirements during inspections, to make them understand that they should not sell electrical products of unknown origin or noncompliant electrical products. The EMSD recognised the importance of publicity and education work. In its future publicity programmes, the EMSD would further enhance publicity and education for the elderly and the underprivileged to raise their awareness of the safety of electrical products. In this regard, the EMSD was liaising with relevant organisations, including the HAD and social welfare organisations, to explore cooperation possibilities.

16. A member who had participated in the volunteer team said that the volunteer team had provided assistance to many SDU occupants in the past. The volunteer team had had volunteers from Electrical Contractors' Association, Electrical Appliances Merchants Association and the EMSD's Staff Club, and the Electrical Appliances Merchants Association even sponsored household electrical products for some cases. The member cited a case where volunteers discovered that the electric water heater of a unit was not installed with a residual current device during the inspection of the FEIs of that unit. As it took time to install a residual current device, the volunteers reminded the elderly singleton of the unit to turn off the power of the electric water heater before bathing. In addition, the volunteer team had worked with Sham Shui Po Police District to install closed-circuit televisions (CCTVs) in three-nil buildings. The project was funded by the president of the Junior Police Call and the volunteer team was responsible for the planning, design, tender and acceptance of the project. The whole project went smoothly and achieved fruitful results with the installation of CCTVs in over 100 buildings. As a result, the crime rate in the district dropped significantly.

The member indicated that the work of the volunteer team was in fact difficult and there were many challenges to overcome, as such the team often had to identify new solutions to solve the problems. As the volunteer team served a large number of people, it hoped to see corresponding policies and receive resource support. The volunteer team would make its best endeavour to provide assistance to as many people as possible with

minimum resources.

The member also believed that the EMSD should identify the problems with the electrical installations first before taking enforcement actions, rather than invoking power at every turn and causing unnecessary distress to the public. On the contrary, it would be more appropriate to conduct publicity and education work targeting the public.

- 17. No other business was raised by members.
- 18. The Chairman thanked members for their attendance and adjourned the meeting. Members would be informed of the date, time and venue of the next meeting in due course.