

**Minutes of the 45th Meeting of
the Electrical Safety Advisory Committee (ESAC)**

Date : 7 October 2022
Time : 2:30 p.m.
Venue : Rooms A & B, Interactive Learning Centre, 4/F, EMSD Headquarters,
3 Kai Shing Street, Kowloon, Hong Kong

Present

Ir Professor CHAN Kwok-cheung, Thomas (Chairman)
Mr PANG Yiu-hung
Ms LEUNG Wai-chun, Karmen
Ir AU Tat-kay, Walter
Ir CHAN Chi-ming, Antonio
Ms CHEUNG Hai-man, Flora
Mr CHEUNG Wing-ho
Mr CHOI Kan-man
Dr LAM King-hang
Ms LEE Wing-han, Susanna
Mr LING Ming-lun
Mr NG Lui-kai, Brian
Professor PUN Kong-pang
Mr TSE Chun-man
Ir YAN Ka-wing
Ms YIP Kam-yee, Candy
Ms YU Hoi-kuen
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	Chief Electrical and Mechanical Engineer / Electricity Legislation, EMSD
Ms SIT Kin-ka	Senior Electrical and Mechanical Engineer / Consumer Installations 1, EMSD
Mr CHAN Chi-kin	Acting Senior Electrical and Mechanical Engineer / Consumer 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

Mr CHEUNG Po-chung, Eric

Senior Director - Power Systems, CLP Power Hong
Kong Limited
(In attendance for Agenda Item 6)

Absent with Apologies

Ms LAU Wing-yan, Rikki

Professor OR Siu-wing

Action

Agenda Item 1: Opening Remarks

1. The Chairman welcomed members to the 45th meeting of the Electrical Safety Advisory Committee (ESAC). This was the first meeting of the current-term ESAC, which was comprised of newly appointed and re-appointed members. The Chairman first introduced the members who attended the meeting and then the officers of the 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. Under that system, 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 should 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 44th Meeting Held on 7 March 2022

3. The Secretariat had sent the minutes of the 44th meeting (i.e. the last meeting of the former-term ESAC) to the Chairman and all members of the former term for perusal, and the minutes had been confirmed by the Chairman and all members of the former term. The Secretariat had also sent the minutes of the meeting to the members of the current-term ESAC by email before this meeting. Members did not raise any amendment to the minutes of the 44th meeting or matters for follow-up. The Chairman declared the minutes of the 44th meeting confirmed. The Secretariat would arrange to upload the minutes of the meeting to the EMSD website for public reference.

Agenda Item 3: Introduction of the Electricity Legislation Division of the EMSD

4. The EMSD presented an overview of the enforcement and promotional work of the Electricity Legislation Division.

Agenda Item 4: Overview of Electrical Safety for the First 6 Months of 2022 (ESAC Paper 03/2022)

5. The EMSD briefed members on the above paper. The paper presented an overview of the enforcement and promotional work of the EMSD on matters of electrical safety for the first 6 months of 2022 and the way forward for the second half of 2022.
6. A member said that during the peak of the epidemic, many members of the electrical trade could not go to the EMSD in person for renewal of their registrations as they had to work from home. The EMSD provided a facilitating measure to the members of the trade by launching electronic services for registration and renewal in a timely manner. In this regard, the member expressed thanks to the EMSD on behalf of the electrical trade.
7. The EMSD thanked the trade for its strong support to the electronic services for registration and renewal applications. The EMSD said that due to the epidemic, submission and processing of registration and renewal applications as well as payment had posed challenges to the trade and the EMSD. Digitising the relevant work processes was indeed a win-win solution for both the trade and the EMSD. Not only could it provide convenience to the members of the trade, but it also saved the applicants from attending an office of the EMSD in person to go through the formalities. Throughout the process, the applicants could input relevant information into the system direct by themselves and accuracy were also improved. The EMSD would actively tie in with the continuous enhancement and wider use of electronic payment services.

In addition, electronic continuing professional development (CPD) courses were also well received by the trade. Currently, registered electrical workers (REWs) were required to complete CPD courses before submitting applications for renewal of registration. Due to the epidemic, many face-to-face courses were affected to a certain extent. In view of this, the EMSD introduced and strengthened the provision of online CPD courses to mitigate the impact of the epidemic on the trade and provide the trade with more diversified and convenient learning modes. With the advancement in technology and the trade keeping abreast of the times, electronic measures would gain more popularity in the trade. The EMSD believed that electronic public service delivery was not only a win-win solution, but also our future development trend. It was hoped that everyone would support and adopt electronic services.

8. A member asked whether the decrease in the number of disciplinary cases completed in the first half of 2022 reflected that most of the registered electrical contractors (RECs) and REWs became more familiar with the legal requirements, and whether these disciplinary cases were isolated incidents. The member asked how the EMSD would summarise the information of previous cases, including commonly identified problems, for reference by the members of the trade.

9. The EMSD thanked the member for the questions. The disciplinary cases completed in the first half of 2022 were isolated incidents. In fact, the EMSD took every case seriously, and had been monitoring the operation of the trade closely through inspections, incident investigations, etc. If problems found or the matter involved required special attention of RECs/REWs, the EMSD would release the information to the electrical trade timely. The EMSD discussed and analysed past electrical incidents with the electrical trade practitioners, and explained relevant legal requirements and matters of concerns through channels such as the technical seminar on electricity regulations held annually and the Electricity News regularly compiled specifically for RECs/REWs. Activity details and the electronic version of the publication were uploaded to the EMSD website for information and reference by the members of the trade.

Taking underwater lighting installations of swimming pools and fountains as examples, when the EMSD conducted inspections and incident investigations on the above-mentioned installations and found that some REWs had overlooked certain safety matters during the installation or maintenance work, the EMSD strengthened the relevant promotional and educational work immediately, including reminding property management companies and members of the electrical trade of the measures that they had to pay attention to and adopt. The EMSD also cooperated with the Food and Environmental Hygiene Department. When licences for swimming pools were issued, the owners would be reminded that they should pay attention to electrical safety and employ RECs to conduct inspections and maintenances for fixed electrical installations for safety sake. In addition, given that REWs were required to complete CPD courses before submitting applications for renewal of registration, elements and key points of checking the electrical installations of swimming pools and fountains for safety were included in the question bank of the CPD courses for REWs to consolidate and enhance their knowledge in this respect through completing the CPD courses.

The EMSD would continue to adopt a multi-pronged approach to further strengthen the promotional and educational work for the electrical trade. The EMSD hoped that members of the trade could pay more attention to the EMSD website and publications for the latest information on electrical safety.

Agenda Item 5: An Update on Generating Facility (GF) Registration (ESAC Paper 04/2022)

10. The EMSD briefed members on the above paper, which presented the background information, statutory requirements, current position and the way forward on GF registration.
11. A member said that there seemed to be no expiration date for GF registration, and asked about the procedures which had to be completed and the ways of disposal of electronic waste arising from dismantling the GF in case a GF owner wished to decommission the facility or cancel the registration in the future.
12. The EMSD responded that no renewal was required for GF registration. After registration of a GF, if the owner wished to decommission the facility or cancel the registration, he/she could submit notification of information change of GFs by Form GF2 to the EMSD. Upon receiving the Form GF2, the EMSD would update or cancel the registration information according to the relevant legal provisions.

Regarding the ways to dispose of the electronic waste, the Government had been keeping track of the local use of solar panels and relevant developments in other places. The EMSD would provide professional advice to relevant departments in this regard for the formulation of a suitable plan. The EMSD would also maintain contact with relevant departments and follow up on the latest developments.

13. A member wished to know whether the registration requirements for solar power GFs were applicable to other renewable energy GFs, and whether the regulatory details for GFs not connected to the power grid were different.
14. The EMSD responded that the registration requirements for GFs were applicable to various kinds of renewable energy GFs, and solar power GFs were more popular currently. If the electricity generated by a GF was used solely by the owner of the facility rather than being sold to power companies, registration for such GF was not required. That said, this case was not common. A common situation where registration was not required was that the GF was part of a fixed electrical installation subject to periodic inspection, testing and certification. The EMSD had been identifying the condition of GFs by inspections and intelligent detection systems. If any irregularities were found, appropriate follow-up or enforcement action would be taken.

15. A member asked about the existing number of GFs which were part of the fixed electrical installations subject to periodic inspection, testing and certification.
16. The EMSD said that according to the data, as at June 2022, about 2 000 GFs were part of the fixed electrical installations subject to periodic inspection, testing and certification, and the number was expected to increase in the future. In addition to monitoring by inspections and the intelligent detection systems, the EMSD would continue to cooperate with the power companies to obtain more accurate data and information for follow-up.
17. A member asked, after the work of a domestic renewable energy GF was completed, whether the REW responsible for the work was required to issue a work completion certificate (Form WR1).
18. The EMSD responded that if the work carried out for a GF involved electrical work, a REC must be employed for the work. After the fixed electrical installation was completed and before it was energised for use, it must be inspected, tested and certified (Form WR1) by the REW responsible for the work to confirm that the installation complied with the legal requirements.

The EMSD emphasised that if GFs supplied electricity to the power grid of the power companies, their electrical safety would affect not only the owners of the GFs, but also the stability of power supply of the power companies and the safety of other electricity users with their installations connected to the power grid. In case of electrical accidents or incidents happened on the GFs, the affected areas could be very wide and the fixed electrical installations in the vicinity might be affected. If a GF connected to the power grid was not part of a fixed electrical installation subject to periodic inspection, testing and certification, the owner of the facility must apply for registration of the GF and carry out maintenance to maintain it in safe working order. The above statutory requirements aimed to ensure electrical safety and power supply stability.

Agenda Item 6: Briefing on CLP Cable Bridge Fire Incident

19. Representative of CLP Power Hong Kong Limited (CLP) briefed members on the investigation and follow-up work on the fire incident that took place at a CLP cable bridge in June 2022.

20. The EMSD thanked the representative of CLP for attending the meeting and briefing members on the matter. The EMSD indicated that concerning the fire incident, apart from CLP, various Government departments, including the Fire Services Department, Hong Kong Police Force, Government Laboratory and Electrical and Mechanical Services Department, had also completed a joint investigation. During the investigation, the Government reviewed the simulation test arranged by CLP and carried out a detailed analysis to determine the cause of fire.
21. A member asked whether CLP would consider replacing the lighting equipment with fireproof ones, in addition to upgrading the fire alarm system and applying fire-retardant coating to cables.
22. Representative of CLP responded that the company had engaged a fire engineering consultant team to examine and review the incident, including the use and safety of lighting and other low-voltage equipment. The company would consider the necessity of adopting fireproof equipment, as well as early replacement of equipment to mitigate the safety risk posed by ageing equipment.

Agenda Item 7: Any Other Business

23. A member would like to discuss the sale of second-hand electrical products at “Morning Bazaars” and the use of household electricity appliances by elderly singletons.

The member said that he had been concerned about the sale of second-hand electrical products at “Morning Bazaars”. He found that the quality of those second-hand electrical products was quite poor. For instance, some products were fitted with 2-pin plugs and some extension units and power cords were battered. He suspected that those products were scavenged items and expressed worries that someone might purchase them for use. According to the member’s understanding, many of those selling the products were the underprivileged and the elderly, some of the trading activities even involved syndicated distributions.

Recently, the member visited about 70 units resided by elderly singletons in “three-nil” buildings and found that more than half of the units were not equipped with residual current devices. Furthermore, he found that some residents used multiple round-pin-to-flat-pin adaptors and some residents even used broken adaptors and sockets. According to the member’s understanding, power companies and certain social welfare organisations had subsidy schemes to help residents improve their living conditions. However, many requirements had to be met in order to apply for the subsidies. As such, the number of successful applicants might be low and the situation should be improved.

The member hoped that the Government, EMSD, social welfare organisations and power companies would pay attention to the above situation, explore possible solutions and provide appropriate assistance to the needy.

24. The EMSD thanked the member for his continued concern and follow-up regarding the sale of second-hand electrical products at “Morning Bazaars” and the use of household electricity appliances by elderly singletons.

The EMSD had arranged inspections and outreach activities to disseminate the statutory requirements of the Electrical Products (Safety) Regulation and relevant safety messages to retail stores selling new or second-hand electrical products. If any contravention of the law was found during the inspection, the EMSD would collect sufficient evidence and take prosecution actions accordingly. In addition, the EMSD also worked with social welfare organisations to organise talks in districts with more underprivileged residents (e.g. Sham Shui Po and Yau Ma Tei). Moreover, they would conduct special inspections and distribute publicity materials, i.e. copies of the Electrical Safety Checklist (the Checklist) prepared by the EMSD, to subdivided units (SDUs), so that SDU occupants could check the fixed electrical installations in their units, thereby raising their awareness of electrical safety. The contact number of the EMSD was provided in the Checklist. Occupants could contact the EMSD to follow up on any electrical installations suspected to be non-compliant or improper. The existing legislation did not empower the EMSD to enter the residential units for immediate inspection. The EMSD was required by the legislation to notify the occupants in writing at least 14 days prior to entering a unit, notwithstanding any reasonable doubt as to the safety of the electrical installations in the unit.

The EMSD was aware that the power companies, some social welfare organisations and volunteer groups had launched schemes and activities to support the underprivileged. In order to use social resources effectively and properly, it was understandable that the recipients had to meet the relevant requirements. The EMSD hoped that the relevant organisations and groups would strengthen their support services to the underprivileged. It would also provide appropriate assistance to those in need. The EMSD welcomed information from relevant organisations and groups, with a view to exploring co-operation possibilities.

25. A member pointed out that despite repeated inspections by the EMSD, the sale of electrical products not complying with safety requirements on the market still were not eradicated. The member claimed that he had purchased an extension unit at Apliu Street and found that the sockets of the extension unit were wrongly wired when he used it. The member was of the view that some electrical products supplied in the market might have quality problems and give rise to safety risks.

The member said that the EMSD and some social welfare organisations had previously produced a promotional pamphlet to encourage SDU occupants to check the fixed electrical installations in their units, which could facilitate early detection of safety hazards for follow-up actions. The member also commented that although there were voluntary organisations and volunteer groups in the community providing assistance to SDU occupants, elderly singletons and the underprivileged, their services might not be able to meet the demand. Furthermore, many volunteer activities had been suspended in recent years due to various constraints posed by the ongoing epidemic. In view of the above, the member had discussed with the personnel of a power company, with the aspiration that the power company would provide resources and the electrical trade deploy volunteer teams for voluntary work. The member considered that it was essential to make good use of limited resources to help the needy.

26. The EMSD thanked the member for his views and would take the opportunity to call upon members to report to the EMSD if they found any electrical products not complying with safety requirements on the market, so as to facilitate the investigation and follow-up actions by the EMSD. The EMSD would conduct inspections on stores selling electrical products in accordance with the risk-based approach and take forward publicity and educational work through multi-pronged measures, with a view to further enhancing the electrical safety of Hong Kong.
27. No other business was raised by members.
28. 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.