

Fire Safety Standards Advisory Group (FSSAG)

Matters Discussed in the 61st FSSAG Meeting held on 19 December 2019

1 *Review of PPA 104 (Issued under cover of FSD Circular Letter No.1/2006)*

In view of the comments raised in the sub-working group of BS5266-1 for emergency lighting, the requirements as stated in the PPA104 (5th Revision) for voltage and hydrometer tests and monthly discharge test were reviewed in-house. The review included voltage test, separation of central battery system test and self-contained battery system test. On this basis, PPA104, 104A and BS5266-1 could be reviewed together. The finding was envisaged to be completed and circulated to members for comment before the next FSSAG meeting.

2 *Enhancement on Application Procedure for Approval/Acceptance of Fire Service Installations and Equipment (FSI) and other Products*

The draft revised version of “Fire Protection Notice No.15 - Guidance for Application for Approval of Portable Equipment and Acceptance of FSI and other Products” (Notice) and the newly introduced “Application Form for Approval of Portable Equipment / Acceptance of FSI and other products” (AF) had been circulated to FSSAG members for comments vide email on 26.9.2019. Having considered the received comments, the study group was now finalizing the Notice and the AF with a view to issuing the Notice and the AF within the first quarter of 2020.

In addition, a new 7-working day pre-vetting of application mechanism for portable equipment and FSI and other products had been introduced. Upon receipt of an application, subject officer would conduct a preliminary vetting within 7 working days in order to screen if the submission was in order. If the application was found incomplete/insufficient, the applicant would be informed to provide the supplement as soon as possible.

3 *Review of the Requirements for Emergency Lighting*

A market survey was conducted by the HKFEMC for the self-contained type emergency lighting. The operation and maintenance (O&M) requirements for central battery emergency lighting and self-contained type emergency lighting were drafted for internal review. The finalized draft would be circulated to all SWG members for comment/

agreement. Except for the O&M requirements of emergency lighting, the review task for BS5266 was completed and the review results had been circulated to all SWG members without comment. HKFEMC's comments would also be sought on the review results. If the O&M requirements could be finalized before the next FSSAG meeting, the review task for BS5266 could be announced as completed and could be endorsed in the next FSSAG meeting. FSD Circular Letter in this regard would then be issued to all parties concerned.

4 *Implementation of BS 5839: 2017 “Fire Detection and Fire Alarm Systems for Buildings – Part 1: Code of Practice for Design, Installation, Commissioning and Maintenance of Systems in Non-domestic Premises”*

The 12th sub-working group meeting was held on 26 Nov 2019. All proposed amendment items under list one, two and three had been reviewed in the first round. Few items were still under minor amendments and ad-hoc meeting would be held in due course. After endorsement of list one, two and three, a testing and commissioning (T&C) check list would be drawn up which would form an appendix attached to the list one, two and three for issuance by means of FSD Circular Letter. The targeted date to accomplish this task was first quarter of 2020.

5 *Review on LPC Sprinkler Rules 2015 incorporating BS EN 12845*

The 11th sub-working group (SWG) meeting was held on 10 October 2019. The task of review of BE EN 12845 had been accomplished successfully and the final draft had been circulated to all FSSAG members in December 2019. The circular letter would be issued soon if no further comments received from members. It was suggested that the final draft be endorsed in the meeting so that action could be taken to prepare the relevant circular letter.

The technical principle of the final draft was endorsed while the textual aspect and choice of words might require to be fine-tuned where appropriate. FSD undertook to fine-tune the final version and then circulate it to all FSSAG Members for perusal. At the same time, FSD would prepare the relevant FSD Circular Letter for issuing to all parties concerned. It was also agreed that the effective date of the new requirement would be three months after the date of the FSD Circular Letter. To promote the issue, FSD would arrange seminars for relevant trades and parties concerned.

6 *Review and evaluation of Sprinkler Stop Valve Management System (SSSMVS) and Stop Valve Management System (SMVS)*

No further update from FSSAG's member on the topic. The item would be deleted in the next meeting.

7 *Alarm Signals and Display for Automatic Fixed Installation other than Water and Drencher System (APPENDIX Ia-revised version)*

FSICA had revised Appendix I-a according to FSD's comments as stated in paragraph 2.7.2 of the minutes the 60th FSSAG meeting. As such, it was proposed that the revised Appendix 1-a be confirmed in the meeting and would be uploaded onto the FSD website for reference of parties concerned. The revised Appendix 1-a was confirmed in the meeting and the item would be deleted in the next meeting.

8 *Proposed Minimum Effective Water Volume in F.S. Water Tank for System Equipped with Transfer System*

The final version of the calculation method was sent to members before the meeting. In fact, the finalized version of calculation of tank capacity diagram was attached to the minutes of the meeting held on 24 September 2019 for members' information and reference. The aforesaid diagram would be included in the updated FS CoP in due course. As no further comment had been received, the item would be deleted in the next meeting.

9 *Automatic Operated Total Flooding Systems complying with NFPA Standard 2001*

Representative of FSICA presented and elaborated the detail comparison summary between 2015 vs 2018 edition NFPA 2001 of total flooding system according to the agreement of last meeting. The comparison summary was circulated to all FSSAG members on 22 October 2019 for perusal and further discussion in this meeting.

According to the new NFPA 2001 (2018 Edition), some major changes when compared with the 2015 Edition were noted which might be different from the current local practices. Among all major changes, three major changes were found deviated from the current local practices, including "enclosure integrity requirement", "egress time study" and "integrate building fire alarm system to serve as a clean agent suppression system releasing control panel". In the light of these major changes, FSICA suggested that a comprehensive study on these new requirements within the industry should be conducted and that a specific date for adoption of the new 2018 Edition would be appropriate such that the industry could be well-prepared.

As different views were noted during the discussion, FSICA would collect more views/comments from relevant industries on these major changes and the ways to put forward the new requirements. Having gathered all relevant information, FSICA might conduct an in-house discussion with members concerned in order to put up a proposal for further discussion in the next FSSAG meeting.

10 *Circuit Isolator Requirement of Fire Detection and Fire Alarm System*

The revised proposal with an additional diagram provided by FSICA had been received on 22 October 2019 and circulated to all FSSAG members for ease of reference. Having studied the revised proposal thoroughly, it was observed that the diagram had explained how to meet the system integrity requirements by means of installing short circuit isolator or in a separate loop. In general, if the fire detection / alarm devices served as an automatic actuating device to initiate other fire service installations, the provision of separate loop circuit or the use of short circuit isolator was considered acceptable.

Apart from the above, FSID had no further comments on the revised proposal. To facilitate the implementation of the new requirement, the revised proposal together with the diagram were endorsed in the meeting so that the new requirement could take effect immediately. The revised proposal and the diagram would be attached to the minutes of this meeting to serve as an official record.

[Post-meeting Notes : FSID had noticed after the meeting that there were some textual problems on the proposal and the diagram which required further clarification. Such being the case, the proposal and the diagram would be further revised for endorsement in the next FSSAG meeting.]

11 *Routine Inspection & Tests for Self-contained Emergency lighting System*

The finalized draft review had been circulated to all SWG members for agreement. A proposal on the issue would come up soon.

12 *System integrity for the use of linear heat detection system*

As no further discussion on the issue was required, the item would be deleted in the next meeting.

13 *The use of fire resisting cable between the main switchboard and sub-switchboard for FSIs (Appendix 1) (FSD)*

As observed in the acceptance inspection, the main switchboard (main incoming power source) and sub-switchboard for FSIs were installed at different places. In view of the reliability of emergency power supply to FSIs, the requirements for the use of fire resisting cable between the main switchboard and sub-switchboard for FSIs was prepared to elaborate the requirements. If the sub-switchboard serving FSIs is installed adjoined to the main switchboard at the same floor, fire resisting cables shall not be required in accordance with FSD Circular Letter No.2/2017.

As some members had different interpretation on the diagram, the representative of HKFEMC undertook to fine-tune the diagram which indicating the normal/primary power supply to FSI should be made simple and easy-understood.

14 *The requirement of Fire Services Completion Advice (FSCA) for the issuance of FS172 (FSD)*

In case the Fire Services Completion Advice (FSCA) from the WSD in respect of permanent water connection for FSI was not available, the AP/ RFSIC should at least provide the endorsed WWO46 Part V to FSD. In fact, adequate and reliable water supply for FSIs should be maintained at all times and therefore FSCA should be available before the issuance of FS172.

As different views were observed from FSSAG's members, the subject matter would be discussed with their members and relevant stakeholders to explore the feasibility.

15 *Inspection, Maintenance, Modification and Repair of Fire Service Installations and Equipment with Moving Parts (Appendix 2) (FSD)*

It was revealed during recent FSI audit inspection carried out by FSD that movable parts of FSI system, such as disc/stem or piston/spring assembly inside Pressure Reducing Valve (PRV) of FH/HR system, which had been installed for a long time might not operate properly due to deterioration which might affect the effective functioning of the whole system. RFSICs were required during the inspection, maintenance, modification or repair of FSI to inspect, test and lubricate (where appropriate) the movable parts of FSI systems (e.g. FS/Sprinkler inlets, hydrant outlet, PRV, control valve, etc.) particularly those having been installed for a long time.

In some buildings/premises, due to shortage of spare parts/components which were essential to operation, some FSI systems could not be resumed normal after actuation.

Therefore, RFSICs were encouraged to advise owners of FSI to keep sufficient stock of spare parts/components of the FSI system for replacement after actuation, particularly for those which were not immediately/readily available in the market, such as multiple jet control (MJC) in long throw sprinkler system, etc., in order to mitigate the existence of fire hazard due to system downtime.

For the purpose of offering guidelines for FSI annual inspection or maintenance procedures, “Annual Inspection Checklists” in respect of Fire Hydrant / Hose Reel Systems and Supply Tanks specifying the maintenance and testing requirements had been firstly introduced. Views and comments amongst relevant parties / stakeholders on the contents of checklists had been collected. The checklists would be implemented soon by issuing circular letter. Four months grace period would be granted for the trade to acquaint with the new arrangement. The checklists would be reviewed after 12 months. Checklists for other FSI systems would also be rolled out in due course.