



Fire Services Standard Requirements
Emergency Electrical Generator
應急發電機的標準消防規定

(Where an electrical installation is required
to comply with the Code of Practice for (Minimum
Fire Service Installations and Equipment))
(如電力裝置是因為須符合最低限
度的消防裝置及設備守則而安裝)

1. Generator (General)
發電機(一般注意事項)

- 1.1 The prime mover to be a diesel driven engine.
原動機須使用柴油引擎。
- 1.2 The generator to be of sufficient capacity to provide an emergency electrical supply to all fire service installations incorporating an electrical installation, and to be capable of maintaining such an emergency supply for a continuous period of 6 hours.
發電機的發電量須足夠為各項設有電力裝置的消防裝置供應並須足以維持連續 6 小時的緊急供電。
- 1.3 The generator shall be provided with both manual and fully automatic starting facilities and be capable of transferring the designed connected load upon mains failure and to do so in not more than 15 seconds.
發電機須設有手動及全自動起動裝置。在電力供應出現故障時，能在 15 秒內將原先設定的總負荷轉移到應急發電機。
- 1.4 The generator to provide power to wired circuits independent of those normally supplied by the power company.
發電機須接連不同的電路，與電力公司一般供應的電路不相連。
- 1.5 Detailed instructions for operation, closing down and for switching off non-essential electrical load shall be clearly displayed, and staff who may be called to carry out these operations shall receive regular instruction.
有關發電機的操作、關閉及關掉非緊急耗電的詳細指示必須清楚展示。執行這些工程的人員須定期接受指示。
- 1.6 A detailed specification (NP/105A) is available from the Fire Safety Command upon request.
詳細規格(NP/105A)可向消防安全總區索取。

2. Generator – Testing
發電機 – 測試

- 2.1 In addition to the routine testing/maintenance which is necessary for any generating set, the following additional tests/checks will be carried out.
除應急發電機所需的日常測試/保養外，還須進行下列各項測試/檢查。
- 2.2 The set shall be exercised monthly. Such exercise shall continue for a minimum of 30 minutes and shall be initiated by automatic and manual means.
發電機須每月開動一次。須以自動及人手操作的裝置起動；開動時間維持至少30分鐘。
- 2.3 Storage batteries for engine starting shall be kept charged at all times and inspected weekly/monthly to determine :-
起動蓄電池須長期保持有電並每周/每月進行檢查，以確定：
- (a) the trickle charger is operating efficiently;
充電器操作有效
 - (b) the electrolyte level and the specific gravity are correct.
電解液水位及比重正確
- 2.4 The results of all operations and tests shall be entered into a book maintained for this purpose.
所有操作及測試結果須記錄在專用記錄簿內。

3. Emergency Generator Rooms
應急發電機房

- 3.1 The room to be completely separated from the rest of the structure by a 2-hour F.R.P. enclosure. Generator sets other than FSI emergency generator may be allowed in the same room. To deny unauthorized access to FSI emergency generator, partitions made up of expanded metal or wire mesh with lockable opening shall be provided.
房間須由具兩小時抗火時效的間隔把房間與建築物其他部分分隔，非消防應急發電機可以裝置於同一房間內。為免受到非授權人士干擾，消防應急發電機必須以鐵板或鐵網分隔，並附有可以上鎖的出入口。
- 3.2 Doors to be of not less than ½-hour F.R.P. and self-closing type; door openings to give direct onto open air wherever practicable.
房門至少須具半小時抗火時效並能自動掩上；房門盡可能應直通戶外。
- 3.3 Door sill of sufficient height to be provided to contain the total contents of the service tank (if installed internally), fuel tank and sump of the generator.
門檻須有足夠高度，能夠容納供應油缸（內置式）、油缸及機油箱的液體總容量。

- 3.4 Permanent ventilation at high and low level to be provided direct to open air. Low level ventilation not to be below level of door sill.
須設有永久的高通風位及低通風位，直接通往戶外。低通風位不可低於門檻高度。
- 3.5 Cable trenches and ducts to be sealed against leakage of fuel from the generator room.
電線坑槽須密封，防止燃料洩出電機房外。
- 3.6 Service tank to be of 3 mm steel construction and of a capacity commensurate with the consumption of the generator but in any case not to exceed a capacity of 500 litres of diesel oil.
供應油缸須由 3 毫米鋼板製成，容量須符合發電機的耗油量，但在任何情況下柴油容量不可超過 500 升。
- 3.7 Should it be necessary to provide in excess of the contents of the service tank, then the excess will have to be stored in a tank external to the generator room and the supply pipe to the service tank provided with a shut off valve suitably indicated. The tank is subject to separate approval by this Department.
如須貯存超過供應油缸指定容量的燃油，額外油量須貯存在另一房間的供應油缸內。供應油缸連接服務油缸之間的油管須有關閉閥，並加上適當指示。這種供應油缸須經本處另行批准。
- 3.8 A buffer wall of brick-work construction or of 9 mm metal sheet to be provided between the side of the service tank and generator, serving as a screen wall between the two.
供應油缸與發電機之間須蓋起磚砌或 9 毫米鐵板緩衝牆作分隔用途。
- 3.9 A remote control valve to be provided on the supply pipe from the service tank to the fuel tank of the generator.
供應油缸與發電機油缸之間的供應喉須裝有遙控開關掣。
- 3.10 Exhaust fumes from the generator must be piped direct to open air.
發電機排出的廢氣須經導管直接排出戶外。
- 3.11 The words “Emergency Generator” and “No Smoking” notice in 120 mm English and Chinese characters to be indicated at the entrance to the room.
發電機房入口處須有告示牌，以 120 毫米高的中英文字體寫上「應急發電機」「Emergency Generator」及「不准吸煙」「No Smoking」。
- 3.12 One 4.5 kg CO₂ fire extinguisher to be provided at the entrance to the Emergency Generator Room.
在應急發電機房入口處須裝置一個 4.5 公斤二氧化碳氣體滅火筒。