(5) Where transformers constitute an essential part of the electrical supply system required by this clause the system shall be so arranged as to ensure the same continuity of the supply as is stated in this clause.

(6) A main electric lighting system which shall provide illumination throughout those parts of the ship normally accessible to and used by passengers or crew shall be supplied from the main source of electrical power.

(7) The arrangement of the main electric lighting system shall be such that a fire or other casualty in spaces containing the main source of electrical power, associated transforming equipment, if any, the main switchboard and the main lighting switchboard, will not render inoperative the emergency electric lighting system required by clause 62(5) paragraphs (a) and (b) or clause 64(5) paragraphs (a), (b) and (c).

(8) The arrangement of the emergency electric lighting system shall be such that a fire or other casualty in spaces containing the emergency source of electrical power, associated transforming equipment, if any, the emergency switchboard and the emergency lighting switchboard will not render the main electric lighting system required by this clause inoperative.

(9) The main switchboard shall be so placed relative to one main generating station that, as far as is practicable, the integrity of the normal electrical supply may be affected only by a fire or other casualty in one space. An environmental enclosure for the main switchboard, such as may be provided by a machinery control room situated within the main boundaries of the space, is not to be considered as separating the switchboards from the generators.

(10) Where the total installed electrical power of the main generating sets is in excess of 3MW, the main busbars shall be subdivided into at least two parts which shall normally be connected by removable links or other approved means; so far as is practicable, the connection of generating sets and any other duplicated equipment shall be equally divided between the parts. Equivalent arrangements may be permitted to the satisfaction of the Chief Surveyor.

62. Emergency Source of Electrical Power in Passenger Ships—(1) A self-contained emergency source of electrical power shall be provided.

(2) The emergency source of electrical power, associated transforming equipment, if any, transitional source of emergency power, emergency switchboard and emergency lighting switchboard shall be located above the upper-most continuous deck and shall be readily accessible from the open deck. They shall not be located forward of the collision bulkhead.

(3) The location of the emergency source of electrical power and associated transforming equipment, if any, the transitional source of emergency power, the emergency switchboard and the emergency electric lighting switchboards in relation to the main source of electrical power, associated transforming equipment, if any, and the main switchboard shall be such as to ensure to the satisfaction of the Chief Surveyor that a fire or other casualty in spaces containing the main source of electrical power, associated transforming equipment, if any, and the main switchboard or in any machinery space of category A will not interfere with the supply, control and distribution of emergency electrical power. As far as practicable, the space containing the emergency source of electrical power, associated transforming equipment, if any, the transitional source of emergency electrical power and the emergency switchboard shall not be contiguous to the boundaries of machinery spaces of category A or those spaces containing the main source of electrical power, associated transforming equipment, if any, or the main switchboard.

(4) Provided that suitable measures are taken for safeguarding independent emergency operation under all circumstances, the emergency generator may be used exceptionally, and for short periods, to supply non-emergency circuits.

(5) The electrical power available shall be sufficient to supply all those services that are essential for safety in an emergency, due regard being paid to such services as may have to be operated simultaneously. The emergency source of electrical power shall be capable, having regard to starting currents and the transitory nature of certain loads, of supplying simultaneously at least the following services for the periods specified hereinafter, if they depend upon an electrical source for their operation:

(a) For a period of 36 hours, emergency lighting:

(i) at every muster and embarkation station and over the sides as required by the Shipping (Lifesaving Appliances) Regulations 1989.

(ii) in alleyways, stairways and exits giving access to the muster and embarkation stations, as required by the Shipping (Musters and Training) Regulations 1989.

(iii) in all service and accommodation alleyways, stairways and exits, personnel lift cars;

(iv) in the machinery spaces and main generating stations including their control positions;

(v) in all control stations, machinery control rooms, and at each main and emergency switchboard;

(vi) at all stowage positions for firemen's outfits;

(vii) at the steering gear; and

(viii) at the fire pump, the sprinkler pump and the emergency bilge pump referred to in sub-clause (5)(d) of this clause and at the starting position of their motors.

(b) For a period of 36 hours, the navigation lights and other lights required by the Shipping (Distress Signals and Prevention of Collisions) Regulations 1988.

(c) For a period of 36 hours:

(i) all internal communication equipment required in an emergency;

(ii) the navigational aids as required by the Shipping (Electronic Navigational Equipment) Regulations 1989; where such provision is unreasonable or impracticable the Chief Surveyor may waive this requirement for ships of less than 5,000 gross tonnage;

(iii) the fire detection and fire alarm system, and the fire door holding and release system; and

(iv) for intermittent operation of the day light signalling lamp, the ship's whistle, the manually operated call points, and all internal signals that are required in an emergency;

unless such services have an independent supply for the period of 36 hours from an accumulator battery suitably located for use in an emergency.

(d) For a period of 36 hours:

(i) one of the fire pumps required by the Shipping (Fire Appliances) Regulations 1989;

(ii) the automatic sprinkler pump, if any; and

(iii) the emergency bilge pump and all the equipment essential for the operation of electrically powered remote controlled bilge valves.

(e) For the period of time required by clause 45(16) of this Code, the steering gear if required to be so supplied by that clause.

(f) For a period of half an hour:

(i) any watertight doors required by clause 12 of this Code together with their indicators and warning signals. Provided the requirements of clause 12(19) of this Code are complied with, sequential operation of the doors may be permitted providing all doors can be closed in 60 seconds;