SC35

Fixed Fire Detection and Fire Alarm System

(1985) (Rev.1 Nov 2005) (Rev.2 Sept 2009) (Rev.3 July 2013)

FSS Code, Ch. 9, 2.25 Sources of power supply System Control Requirements

There shall be not less than two sources of power supply for the electrical equipment used in the operation of the fixed fire detection and fire alarm system, one of which shall be an emergency source. The supply shall be provided by separate feeders reserved solely for that purpose. Such feeders shall run to an automatic change over switch situated in or adjacent to the control panel for the fire detection system.

Interpretation

1. Continuity of power supply

- 1.1 Operation of the automatic changeover switch or a failure of one of the power supplies shall not result in permanent or temporary degradation of the fixed fire detection and fire alarm system.
- 1.2 Where the fixed fire detection and fire alarm system would be degraded by the momentary loss of power, a source of stored energy having adequate capacity shall be provided to ensure the continuous operation during changeover between power supplies.
- 1.3 Connection of electrical power supplies to an automatic changeover switch shall be arranged such that a fault will not result in the loss of all supplies to the automatic changeover switch.

Emergency supply

- 2.1 The fixed fire detection and fire alarm system emergency power may be supplied by an accumulator battery or from the emergency switchboard. Where the system is supplied from an accumulator battery, the arrangements are to comply with the following requirements:
 - 1. the accumulator battery shall have the capacity to operate the fire detection system under normal and alarm conditions during the period required by SOLAS Chapter II-1, Regulation 42 or 43 (as applicable) for the emergency source of power supply.
 - 2. the rating of the charge unit, on restoration of the input power, shall be sufficient to recharge the batteries while maintaining the output supply to the fire detection system.
- 3. the accumulator batteries are to be suitably located for use in an emergency.

Note:

For battery recording and UPS arrangements, see IACS UR E18 and E21.

2.2 Where the emergency feeder for the electrical equipment used in the operation of the fixed fire detection and fire alarm system is supplied from the emergency switchboard, it shall run from this switchboard to the automatic changeover switch without passing through any other switchboard.

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FSS Code, Ch. 9, 2.5.1 Visual and Audible Fire Signals

(cont)

2.5.1.1 The activation of any detector or manually operated call point shall initiate a visual and audible fire detection alarm signal at the control panel and indicating units. If the signals have not been acknowledged within 2 min, an audible fire alarm shall be automatically sounded throughout the crew accommodation and service spaces, control stations and machinery spaces of category A. This alarm sounder system need not be an integral part of the detection system.

Interpretation

Power supply to the alarm sounder system when not an integral part of the detection system

- The alarm sounder system utilised by the Fixed Fire Detection and Fire Alarm System shall be powered from no less than two sources of power, one of which shall be an emergency source of power.
- 2 In vessels required by SOLAS regulation II-1/42 or 43 to be provided with a transitional source of emergency electrical power the alarm sounder system shall also be powered from this power source.

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Note:

- 1. This UI is to be uniformly implemented by IACS Members and Associates for systems approved on or after 1 July 2010.
- 2. Revision 3 of UI SC35 is to be implemented for ships contracted for construction on or after 1 January 2014.
- 3. The "contracted for construction" date means the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. For further details regarding the date of "contract for construction", refer to IACS Procedural Requirement (PR) No. 29.

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