

# E17 Generators and generator systems, having the ship's propulsion machinery as their prime mover, not forming part of the ship's main source of electrical power

(June 2002)  
(Rev.1  
Feb 2021)

Generators and generator systems, having the ship's propulsion machinery as their prime mover but not forming part of the ship's main source of electrical power<sup>1</sup> may be used whilst the ship is at sea to supply electrical services required for normal operational and habitable conditions provided that:

1. there are sufficient and adequately rated additional generators fitted, which constitute the main source of electrical power required by SOLAS, meeting the requirements of IEC 60092-201:2019<sup>2</sup> paragraph ~~6.2.38.1.1~~.
2. arrangements are fitted to automatically start one or more of the generators, constituting the main source of electrical power required by SOLAS, in compliance with paragraph 2.2 of SC 157 and also upon the frequency variations exceeding  $\pm 10\%$  of the limits specified below.
3. within the declared operating range of the generators and/or generator systems the specified limits for the voltage variations in IEC 60092—304 IEC 60092-301:1980/AMD2:1995<sup>3</sup> and the frequency variations in UR E5 can be met.
4. the short circuit current of the generator and/or generator system is sufficient to trip the generator/generator system circuit-breaker taking into account the selectivity of the protective devices for the distribution system.

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#### Notes-Footnotes:

1. Such generator systems are those whose operation does not meet the requirements of IEC 60092-201:2019, paragraph ~~6.2.38.1.1~~.
2. ~~IEC 60092-201 Electrical installations in ships—part 201: System design—General~~
3. ~~IEC 60092-301: Electrical installations in ships—part 301: Equipment—Generators and motors.~~
4. ~~A 'blackout situation' means that the main and auxiliary machinery installations, including the main power supply, are out of operation but the services for bringing them into operation (e.g. compressed air, starting current from batteries etc.) are available.~~

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#### Note:

1. Rev.1 of this UR is to be uniformly implemented by IACS Societies on ships for which the date of contract for construction is on or after 1 July 2022.
2. 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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5. where considered appropriate, load shedding arrangements are fitted to meet the requirements of paragraph 2.3 of SC 157.
6. on ships having remote control of the ship's propulsion machinery from the navigating bridge means are provided, or procedures be in place, so as to ensure that supplies to essential services are maintained during manoeuvring conditions in order to avoid a blackout situation<sup>42</sup>.

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Footnote:

2. A 'blackout situation' means that the main and auxiliary machinery installations, including the main power supply, are out of operation but the services for bringing them into operation (e.g. compressed air, starting current from batteries etc.) are available.

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