



NORWEGIAN HULL CLUB

Casualty Information

No. 104 – February 2020

Norwegian Hull Club wishes to emphasize increased safety on board with a focus on **welfare, environment, assets** and the **distribution of useful experience**. In this newsletter, we focus on taking measures regarding performance and capacity testing of Auxiliary Engines, as well as Dead Ship Condition.

Dear seafarer,

Are your generators ready to perform?

AUXILIARY ENGINE PERFORMANCE & CAPACITY TESTING

With reference to cases experienced by The Club, we have observed that the condition of Auxiliary Engines has not always been optimal. This has often meant that the engines are not capable of taking the required/designed load.

In cases where scheduled overhaul or repairs to one of the Auxiliary Engines has been required, when a failure has subsequently occurred in an additional engine, the last available engine should be in such a condition that the generator is capable of taking the load required to the propulsion plant, primary and secondary essential services.

Ref. SOLAS REGULATIONS II-1/40 . GENERAL - AND II-1/41 - MAIN SOURCE OF ELECTRICAL POWER AND LIGHTING SYSTEMS.

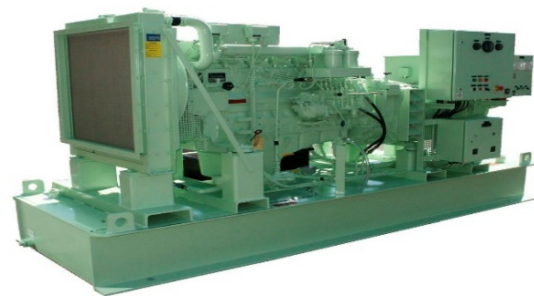
In addition to the inherent risks of not having enough power available for propulsion if needed, poor engine condition may contribute to severe damage to the engine over time, e.g. if engine ignition timing is not tuned and optimized.

We advise that proper condition evaluation and capacity test of the generator sets should be performed and documented on a regular basis, in accordance with the engine makers' recommendations.

REF. TO IACS REQUIREMENT CONCERNING MACHINERY INSTALLATIONS:

M31.1 *The continuity of electrical power on vessels with periodically unattended machinery spaces is to be assured in accordance with M31.2 and M31.3.*

M31.2 *For vessels having the electrical power requirements normally supplied by one ship's service generator in case of*



AN EMERGENCY GENERATOR SET *Credit: Lindenberg Anlagen*

loss of the generator in operation, there shall be adequate provisions for automatic starting and connecting to the main switchboard of a standby generator of sufficient capacity to permit propulsion and steering and to ensure the safety of the ship with automatic re-starting of the essential auxiliaries including, where necessary, sequential operations. This standby electric power is to be available automatically in not more than 45 seconds.

M31.3 *For vessels having the electrical power requirements normally supplied by two or more ship's service generating sets operating in parallel, arrangements are to be provided (by load shedding, for instance) to ensure that in case of loss of one of these generating sets, the remaining ones are kept in operation without overload to permit propulsion and steering and to ensure the safety of the ship.*

PROCEDURES FOR DEAD SHIP CONDITION

Procedures for Dead ship condition should be in place and tested.

SOLAS II-1/26.4 - DEAD SHIP CONDITION

Dead Ship Condition, for the purpose of regulations II-1/42.3.4 and II-1/43.3.4, *should be understood to mean a condition under which the main propulsion plant, boilers and auxiliaries are not in operation and - in restoring the propulsion - no stored energy for starting the propulsion plant, the main source of electrical power and other essential auxiliaries should be assumed available. It is assumed that*

means are available to start the emergency generator at all times.

Emergency-generator-stored starting energy is not to be directly used for starting the propulsion plant, the main source of electrical power and/or other essential auxiliaries (emergency generator excluded).

We recommend that, in order to have your generator sets ready at all times, routine performance/capacity test of the generator should be included in the maintenance system.

In addition, proper training of the crew in Dead Ship Condition Procedures is required in order to be prepared if an emergency situation should occur.

Norwegian Hull Club wishes you all fair winds and following seas.