Control and maintenance of pressure and temperature of liquefied gas fuel tanks after the activation of the safety system

The International Code of Safety for Ships Using Gases or Other Low-Flashpoint Fuels (IGF Code), MSC Res.391(95);

Paragraph 6.9.1.1 states:

With the exception of liquefied gas fuel tanks designed to withstand the full gauge vapour pressure of the fuel under conditions of the upper ambient design temperature, liquefied gas fuel tanks' pressure and temperature shall be maintained at all times within their design range by means acceptable to the Administration, e.g. by one of the following methods:

0.1 reliquefaction of vapours;
0.2 thermal oxidation of vapours;
0.3 pressure accumulation; or
0.4 liquefied gas fuel cooling.

The method chosen shall be capable of maintaining tank pressure below the set pressure of the tank pressure relief valves for a period of 15 days assuming full tank at normal service pressure and the ship in idle condition, i.e. only power for domestic load is generated.

Paragraph 6.9.1.2 states:

Venting of fuel vapour for control of the tank pressure is not acceptable except in emergency situations.

Interpretation

Liquefied gas fuel tanks' pressure and temperature shall be controlled and maintained within the design range at all times including after activation of the safety system required in 15.2.2 for a period of minimum 15 days. The activation of the safety system alone is not deemed as an emergency situation.

Note:

1. This Unified Interpretation is to be uniformly implemented by IACS Societies on ships contracted for construction on or after 1 January 2018.

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.