

◄

GC10 Reliquefaction plant of moter-driven LNGcarriers

1 Mechanical refrigeration fitted as the primary system for cargo pressure control

- 1.1 Section 7.2 is based on the assumption that paragraph 7.1.1 is being compiled with by using means defined in sub-paragraph 7.1.1.1. That is to say, a mechanical refrigeration system is fitted as the primary means of maintaining the cargo tank pressure below MARVS.
- 1.2 Section 7.2 should apply to refrigeration systems when fitted on LNG carriers, ie standby capacity will be required as detailed in 7.2.1. A stand-by LNG/refrigerant heat exchanger need not be provided and the fitted LNG/refrigerant heat exchanger will not be required to have 25% excess capacity over that for normal requirements¹). Other heat exchangers utilizing water cooling should have a stand-by or have at least 25 per cent excess capacity.
- 1.3 Paragraph 7.2.1 states that unless an alternative means of controlling the cargo pressure/temperature is provided to the satisfaction of the Administration, a stand-by unit (or units) affording spare capacity at least equal to the largest required single unit should be fitted. For the purpose of complying with the above, a suitable alternative means of pressure/temperature control would be:



1.3.1 Auxiliary boiler(s) capable of burning the boil-off vapours and disposing of the generated steam or an alternative waste heat system acceptable to the Society. Consideration will be given to systems burning only part of the boil-off vapour if it can be shown that MARVS will not be reached within a period of 21 days.

1.3.2 Controlled venting of cargo vapours as specified in paragraph 7.1.1.5 if permitted by the Administrations concerned.

- 2 Mechanical refrigeration fitted as secondary system for cargo pressure control Where a refrigeration plant is fitted as a means of disposing of excess energy as detailed in the 2nd sentence of paragraph 7.1.1.2, no stand-by unit will be required for the refrigeration plant.
 - 1) The reason for this relaxation is that corrosion and fouling problems are not expected in LNG/refrigerant heat exchangers.