RUSSIAN MARITIME REGISTER OF SHIPPING

CIRCULAR LETTER **No. 315-24-1875c** dated 12.12.2022

Re:

amendments to the Rules for the Classification, Construction and Equipment of Mobile Offshore Drilling Units and Fixed Offshore Platforms, 2022, ND No. 2-020201-019-E, in connection with coming into force of IACS unified requirement (UR) M60 (Rev.1 Nov 2021)

Item(s) of supervision:

automated main gas turbines

Entry-into-force date:
01.01.2023

~~Cancels / amends / adds Circular Letter No.~~ ~~dated~~

Number of pages: 1 + 3

Appendices:

Appendix 1: information on amendments introduced by the Circular Letter

Appendix 2: text of amendments to Part XIV "Automation"

Director General Konstantin G. Palnikov

Text of CL:

We hereby inform that the Rules for the Classification, Construction and Equipment of Mobile Offshore Drilling Units and Fixed Offshore Platforms shall be amended as specified in the Appendices to the Circular Letter.

It is necessary to do the following:

1. Bring the content of the Circular Letter to the notice of the RS surveyors, interested organizations and persons in the area of the RS Branch Offices' activity.
2. Apply the provisions of the Circular Letter during review and approval of the technical documentation on products installed on board the MODU and FOP contracted for construction or conversion on or after 01.01.2023, in the absence of a contract — according to 5.10 of Part II "Technical Documentation" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships, starting from 01.01.2023.

List of the amended and/or introduced paras/chapters/sections:

Part XIV: Table 4.2.9-3

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"Thesis" System No. 22-101791

Appendix 1 to Circular Letter
No. 315-24-1875c dated 12.12.2022

Information on amendments introduced by the Circular Letter
(for inclusion in the Revision History to the RS Publication)

Nos.	Amended paras/chapters/ sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
1	Table 4.2.9-3	Monitored parameters and types of automatic protection for main gas turbines have been specified considering provisions of IACS UR M60 (Rev.1 Nov 2021)	315-24-1875c of 12.12.2022	01.01.2023

RULES FOR CLASSIFICATION, CONSTRUCTION AND EQUIPMENT OF MOBILE OFFSHORE DRILLING UNITS AND FIXED OFFSHORE PLATFORMS, 2022,

ND No. 2-020201-019-E

PART XIV. AUTOMATION

4 AUTOMATED MACHINERY AND PLANTS

Table 4.2.9-3 is replaced by the following one:

"Table 4.2.9-3

Nos	Monitored parameter for main gas turbines	Group 1 Indication, alarm	Group 2 Automatic start of standby pumps with alarm	Group 3 Automatic shutdown of gas turbine with alarm
1.0	Lub. oil inlet pressure	Ind./Min.[4]	Start	Shutdown
2.0	Lub. oil inlet temperature	Ind./Max.	–	–
3.0	Bearing temperature	Ind./Max.	–	–
4.0	Gas temperature at high-pressure turbine outlet	Ind./Max.	–	Shutdown
5.0	Flame failure or ignition system failure or stratification of temperatures over flame tubes	Alarm	–	Shutdown
6.0	Automatic start system failure	Alarm	–	–
7.0	Fuel oil pressure at gas turbine engine inlet[1]	Ind./Min	–	Shutdown
8.0	Fuel oil pressure before burners[1]	Ind./Min.	–	Shutdown
9.0	Fuel oil temperature before burners[2]	Ind./Min./Max.	–	–
10.0	Pressure differential across air cleaner	Ind./Max.	–	–
11.0	Gas turbine vibration at each support	Ind./Max.[4]	–	Shutdown
12.0	Axial displacement of rotor	Max.	–	Shutdown
13.0	Gas turbine speed (at each rotor)[3]	Ind./Max.	–	Shutdown
14.0	Oil level in lubricating oil tank	Ind./Min.	–	–
15.0	Automatic gas turbine shutdown	Alarm	–	–
16.0	Gas concentration in machinery space	Ind./Max.	–	Shutdown
17.0	Temperature under gas turbine sheath	Ind./Max.	–	–
18.0	Gas temperature after gas turbine	Ind./Max.[4]	–	Shutdown
19.0	Control-safety-alarm system power supply failure	Alarm	–	–
20.0	Coolant temperature	Ind./Max.	–	–
21.0	Pressure differential across lubricating oil filter	Max.	–	–
22.0	Vacuum pressure at the compressor inlet	Max.[4]	–	Shutdown

Group 1: Common sensor for indication, alarm and slowdown.
Group 2: Sensor for automatic start of standby pumps.
Group 3: Sensor for shutdown.
Ind. - remote indication (continuous or on call).
Max. - alarm for high value.
Min. - alarm for low value.
Alarm - alarm activated.
Start - automatic start of standby pumps.
Shutdown - gas turbine load reduction.

[1] When gas is used.
[2] When high-viscosity fuels are used.
[3] Shutdown resulted from power turbine speed.

[4] Alarm at the measuring point shall be activated prior to arriving the critical condition for the activation of safety devices.

N o t e s : 1. For Group 1 parameters a common sensor is provided for indication and alarm systems;

for Group 2 parameters — a sensor for automatic start of stand-by pumps;

for Group 3 parameters — a sensor of safety system (turbine shutdown).

2. The list of monitored parameters and types of automatic protection and indication specified in the table may be amended by the manufacturer based on the results of the relevant failure mode and effect analysis (FMEA), which shall be submitted to the RS for agreement.

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