

CIRCULAR LETTER

No. 110-312-1-1695c

dated 04.02.2022

Re:

amendments to the Rules for the Classification and Construction of Nuclear Ships and Floating Facilities, 2022, ND No. 2-020101-168-E

Item(s) of supervision:

technical documentation on nuclear ships and floating facilities; products used for construction of nuclear ships and floating facilities

Entry-into-force date:

15.02.2022

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 Parts I "General", IV "Hull", VII "Machinery Installations", VIII "Nuclear Steam Supply Systems" and X "Electrical Equipment"

Director General

Konstantin G. Palnikov

Text of CL:

We hereby inform that due to completion of testing the power unit of the project 22220 leading nuclear icebreaker, the Rules for the Classification and Construction of Nuclear Ships and Floating Facilities 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 involved in technical supervision during manufacture of materials and products for the nuclear ships and floating facilities.
- 2. Apply the provisions of the Circular Letter when performing technical supervision during construction of the nuclear ships and floating facilities, during review and approval of the technical documentation and when performing technical supervision during manufacture of materials and products for the nuclear ships and floating facilities contracted for construction on or after 15.02.2022.

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

Part I: para 3.1 Part IV: para 6.6

Part VII: title, para 1.1

Part VIII: paras 7.5.7 and 17.3

Part X: para 2.7

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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	Part I, para 3.1	The definition "Nuclear power unit" has been amended	110-312-1-1695c of 04.02.2022	15.02.2022
2	Part IV, para 6.6	The requirements have been specified due to changing the title of Part VII	110-312-1-1695c of 04.02.2022	15.02.2022
3	Part VII, title	The title has been changed	110-312-1-1695c of 04.02.2022	15.02.2022
4	Part VII, para 1.1	The parts of the Rules for the Classification and Construction of Sea-Going Ships have been introduced containing requirements to the nuclear power unit	110-312-1-1695c of 04.02.2022	15.02.2022
5	Part VIII, para 7.5.7	The requirements have been specified due to changing the title of Part VII	110-312-1-1695c of 04.02.2022	15.02.2022
6	Part VIII, para 17.3	The requirements have been specified due to changing the title of Part VII	110-312-1-1695c of 04.02.2022	15.02.2022
7	Part X, para 2.7	The requirements have been specified due to changing the title of Part VII	110-312-1-1695c of 04.02.2022	15.02.2022

RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF NUCLEAR SHIPS AND FLOATING FACILITIES, 2022,

ND No. 2-020101-168-E

PART I. GENERAL

3 DEFINITIONS AND EXPLANATIONS

1 Para 3.1. The definition "Nuclear power unit" is replaced by the following text:

"Nuclear power unit is the main power unit designed to perform primary functions of nuclear ship or nuclear floating facility. Nuclear power unit comprises nuclear reactors including supply systems, steam turbines including supply systems and electrical energy system comprising main generators and electrical propulsion engines."

PART IV. HULL

6 CONTAINMENT

- 2 **Para 6.6** is replaced with the following text:
- **"6.6** Containment shall be operational when compressed due to action of external pressure and in case of flooding of the ship/floating structure (refer to 3.5, Part VII "Machinery Installations and Machinery").".

PART VII. MACHINERY INSTALLATIONS

3 The Part title is replaced with the following text:

"PART VII. MACHINERY INSTALLATIONS AND MACHINERY".

1 GENERAL

- 4 **Para 1.1** is replaced with the following text:
- "1.1 Nuclear power unit shall comply in full with all the requirements of Parts VII "Machinery Installations", VIII "Systems and Piping", IX "Machinery", X "Boilers, Heat Exchangers and Pressure Vessels" and XV "Automation" of the RS Rules and requirements of this Part.".

PART VIII. NUCLEAR STEAM SUPPLY SYSTEMS

7 ACCIDENT ANALYSIS

- 5 **Para 7.5.7**. The first paragraph is replaced with the following text:
- "7.5.7 Ship grounding and stranding with heel as specified in 2.1, Part VII "Machinery Installations and Machinery" shall be evaluated with regard to the following:".

17 SYSTEMS AND PIPING

- 6 **Para 17.3** is replaced with the following text:
- **"17.3** All pipelines penetrating the containment shall comply with 3.3 and 3.4, Part VII "Machinery Installations and Machinery"."

PART X. ELECTRICAL EQUIPMENT

2 GENERAL REQUIREMENTS

- 7 **Para 2.7** is replaced with the following text:
- "2.7 In accordance with Table 2.1, Part VII "Machinery Installations and Machinery", electrical equipment of machinery and systems important for safety of the steam supply system shall be capable of faultless operation under continuous heel up to 30°, roll up to 45° and trim up to 10°.".