



ORDER  
№ A 242  
Sofia, 31.03.2022

Pursuant to Art.10, para. 1, item 3 and item 4, Art.28, para. 1 and Art.30, para 1 of the Law on National Accreditation of Conformity Assessment Bodies and the relevant item 4.3.7 of BAS QR 2 Accreditation Procedure in connection with open procedure with ref. № 389/290 ОКК/ПА/ПО/ 04.10.2021, field assessment report with ref. № 389/290 ОКК/6/В/17.12.2021, letter and statement of the Accreditation Commission with ref. № 389/290 ОКК/011/В/ 30.03.2022, I hereby

RE-ACCREDIT

Inspection Body Type C, Non-destructive Testing Centre Safety and Quality Directorate,  
Kozloduy NPP EAD, Kozloduy, Vratsa Region

Address of management and office: 3321 Kozloduy, Vratsa Region

To perform inspection of the following scope:

Scope type: flexible for part of scope

№	Field of Inspection	Type of Inspection	Parameter of Inspection / Characteristic	Test and Measurement Methods Used During Inspection, Inspection Procedure	Regulations, Standards, Specifications, Schemes
1	2	3	4	5	6
1.	Welded joints;  Pipelines and pipeline parts; Metals, metal items and facilities;  Pressure vessels; Pressure facilities, tanks; castings.	Initial and periodic testing of new products and facilities, and in-service testing of products and facilities.	Surface discontinuities - location, dimensions, space between them, types.	Visual Testing (VT) and measuring;  GOST R 50.05.08;  БДС EN ISO17637;  БДС EN ISO 5817  Testing procedure. Visual testing'; No. ЦЦК.ВК.ПЦ. 0901-02/08;  Testing procedure. Visual non-destructive testing using remote operation devices'; No. ЦДК.ВКДС.ПЦ. 0901-13/06.	Federal Standards and Rules-105-18 (НП-105-18); Federal Standards and Rules-084-15 (НП -084-15); GOST R 50.05.17; Construction Rules and Procedures - 3.05-05-84 (СНИП 3.05-05-84); 'Regulation on the construction, safe operation and technical surveillance of pressure facilities', Arts. 19, 20 and 21, promulgated in SG, issue 64 of 18.07.2008; Regulation No. 9, Art. 488, promulgated in SG, issue 72 of 17.08.2004; БДС EN ISO 6520-1; БДС EN ISO 5817; БДС EN ISO13919-1; Technical Specifications
2.	Welded joints;  Pipelines and pipeline parts; Metals, metal items and	Initial and periodic testing of new products and facilities, and in-service testing of	Surface discontinuities, configuration and dimensions, space between them, types	Liquid penetrant testing (PT); GOST R 50.05.09;  БДС EN ISO 3452-1,2,3*	Federal Standards and Rules-105-18(Нн-105-18); Federal Standards and Rules-084-15(Нн-084- 15);

	facilities;  Pressure vessels; Pressure facilities, Tanks; castings.	products and facilities.		GOST 18442;  'Testing procedure. Non-destructive testing with liquid penetrants';  №.ЦЦК.КЦ.ПЦ.0901-03/06.	GOST R 50.05.17; Construction Rules and Procedures - 3.05-05-84 (СниП 3.05-05-84); 'Regulation on the construction, safe operation and technical surveillance of pressure facilities', Arts. 20 and 21, promulgated in SG, issue 64 of 18.07.2008; Regulation No. 9, Art. 488, promulgated in SG, issue 72 of 17.08.2004; Technical Specifications
3.	Welded joints; Pipelines and pipeline parts; Metals, metal items and facilities;  Pressure vessels; Pressure facilities, Tanks; castings.	Initial and periodic testing of new products and facilities, and in-service testing of products and facilities.	Surface discontinuities - location, dimensions, space between them, types	Radiographic testing (RT);  GOST R 50.05.07;  БДС EN ISO 5579;  БДС EN ISO 17636-1;  'Testing procedure. Radiographic non-destructive testing':  No. ЦДК.РГК.ПЦ.0901-04/05.	Federal Standards and Rules-105-18 (НП-105-18); Federal Standards and Rules-084-15 (НП -084-15); GOST R 50.05.17; Construction Rules and Procedures - 3.05-05-84 (СниП 3.05-05-84); 'Regulation on the construction, safe operation and technical surveillance of pressure facilities', Arts. 19, promulgated in SG, issue 64 of 18.07.2008; Regulation No. 9, Art 488, promulgated in SG, issue 72 of 17.08.2004; БДС EN ISO10675-1; БДС EN ISO10893-6; БДС EN ISO 6520-1; БДС 13060 Technical Specifications
4.	Welded joints; Pipelines and pipeline parts; Metals, metal items and facilities; Pressure vessels; Pressure facilities. Tanks; castings.	Initial and periodic testing of new products and facilities, and in-service testing of products and facilities.	Nearsurface and internal discontinuities - location, dimensions, space between them and types. Wall thickness.	Ultrasonic testing (UT) БДС EN ISO 17640; БДС EN ISO 16823; БДС EN 10228-3.4; БДС EN 12668 -1 БДС EN 12668-2 БДС EN 12668-3; БДС EN ISO 16809; БДС 10037; БДС 13598; БДС 13661; БДС 14924; БДС 16323; БДС EN ISO 16826; БДС EN ISO 16827; GOST R 50.05.02; GOST R 50.05.03; GOST R 50.05.04; GOST R 50.05.05; GOST R 50.05.18; 'Testing procedure. Ultrasonic testing';	Federal Standards and Rules-105-18 (НП-105-18); Federal Standards and Rules - 084—15(НП -084-15); GOST R 50.05.17; GOST 24507 Construction Rules and Procedures - 3.05-05-84 (СниП 3.05-05-84); 'Regulation on the construction, safe operation and technical surveillance of pressure facilities*', Art 19, promulgated in SG, issue 64 of 18.07.2008;

				No. ЦДК.УЗК.ПЦ.0901-05/05; 'Testing procedure. Ultrasonic testing of wall thickness'; бю.ЦДК.УЗД.ПЦ.0901-10/06.	Regulation No. 9, Art 488, promulgated in SG, issue 72 of 17.08.2004; БДС EN ISO11666; БДС EN ISO 23279; БДС EN ISO 10228-3,4; Technical Specifications
5.	Welded joints; Pipelines and pipeline parts; Metals, metal items and facilities; Pressure vessels; Pressure facilities, tanks.	Initial and periodic testing of new products and facilities, and in-service testing of products and facilities.	Macrostructure;  Microstructure (zoom x100, x500, x1000);  Grain size; Non-metallic inclusions; Susceptibility to intergranular corrosion of steel and welded joints;  Ferrite phase content (%)	Metallographic testing, GOST 6032;  GOST R 53686;  БДС EN ISO 4499-1;  БДС 3690;  БДС 12730;  'Testing procedure. Inspection of metals, alloys and welded joints applying metallographic testing',  No. ЦДК.ММ.ПЦ.0901-14/03.	Federal Standards and Rules-105-18 (НП-105-18); Federal Standards and Rules-084-15 (НП -084-15); GOSTR50.05.17; 'Regulation on the construction, safe operation and technical surveillance of pressure facilities' Art 11, promulgated in SG, issue 64 of 18.07.2008; Regulation No. 9, Art. 488, promulgated in SG, issue 72 of 17.08.2004; Technical Specifications
6.	Welded joints; Pipelines and pipeline parts; Metals, metal items and facilities; Pressure vessels; Pressure facilities, Tanks.	Initial testing of new products and facilities, and in-service testing of products and facilities.	Quantitative analysis of chemical elements (weight %):  Hydrogen: 0,032-1,03 % Manganese: 0,16-1,77 %;  Silicium: 0,14-1,71 %.; Phosphorus: 0,018-0,049%; Sulfur 0,010-0,069%; Chrom 0,080-18,8%; Nickel: 0,16-21,9%; Molybdenum: 0,110-3,67% Vanadium: 0,11-0,53% Copper 0,013-1,01 % Niobium: 0,022-0,98% Cobalt: 0,070- 0,22% Titanium: 0,15-0,44% Aluminum: 0,037-0,32 %.	Spectral analysis testing GOST R 54153-2010;  'Testing procedure. Control of metals, alloys and welded joints applying spectral analysis technique  No. ЦДК.СпМ.ПЦ.0901-20/03, от 05.07.2021 г.	Federal Standards and Rules-105-18 (НП-105-18); Steel and alloy grade guide, Sorokin, Moscow, 1989;  Technical Specifications

7.	Welded joints; Pipelines and pipeline parts; Metals, metal items and facilities; Pressure vessels; Pressure facilities, tanks.	Initial and periodic testing of new products and facilities, and in-service testing of products and facilities.	Brinell hardness; Vickers hardness; Rockwell hardness; Vickers microhardness; Testing range: 80-700 HB; 150-300 HB; 20-70 HRC; 400-800 HV30; 35-1080 HV; microhardness 5-2000 HV	Hardness testing, БДС EN ISO 18265; БДС EN ISO 6506-1,4; БДС EN ISO 6507-2; БДС EN ISO 6508-1; 'Testing procedure. Hardness testing of steel, alloys, welded joints, elements of facilities and pipelines', No. ЦДК.Т.ПЦ.0901-18/03.	'Regulation on the construction, safe operation and technical surveillance of pressure facilities', Art. 11, promulgated in SG, issue 64 of 18.07.2008; Regulation No. 9, Art. 488, promulgated in SG, issue 72 of 17.08.2004; Technical Specifications
8.	Welded joints; Pipelines and pipeline parts; Metals, metal items and facilities.	Initial and periodic testing of new products and facilities, and in-service testing of products and facilities.	Surface discontinuities - dimensions, space between them, and types	Eddy Current Testing (ET), GOST R 50.05.10; БДС EN ISO 15549; 'Testing procedure. Eddy current testing', No. ЦДК.ВТК.ПЦ.0901-23-01/05.	Regulation No. 9, Art. 488, promulgated in SG, issue 72 of 17.08.2004; Federal Rules and Procedures -084 -15 (НП -084-15); Technical Specifications
9.	Mechanical and electrical equipment; machines, units and facilities.	Initial and periodic testing of new products and facilities, and in-service testing of products and facilities.	Temperature emitted from the surface of an object, ranging from - 40 °C to + 2000°C.	Thermal imaging testing БДС EN 16714-1; БДС EN 16714-2; 'Testing procedure. Thermal infrared non-destructive testing'; No. ЦДК.ТБК.ПЦ.0901-12/04.	Regulation No. 9, Art. 488, promulgated in SG, issue 72 of 17.08.2004; Technical Specifications

*Flexible scope\* Implementing a new version of standards/documents or standards/documents replacing them is allowed. An updated list of standards/documents and their dated versions is provided by CAB.*

"Regulation on the construction, safe operation and technical surveillance of pressure facilities" (adopted with Council of Ministers' Decree No. 164, SG, issue 64/2008);

Regulation No. 9 on the technical operation of electrical power plants and networks (SG, issue 72/2004).

НП-105-18 Federal Standards and Rules in the Field of Atomic Energy Use 'Rules for the control of metal equipment and pipelines of nuclear power plants in their manufacture and installation'

НП - 084 - 15 Federal Standards and Rules in the Field of Atomic Energy Use 'Rules for in-service inspection of base metal, welds and cladding in the course of operation of equipment, pipelines and other elements of nuclear power plants' СНиП 3.05-05-84 Construction rules and procedures, 'Processing equipment and process pipelines'

\*\* Fixed scope

ЦДК.СпМ.ПЦ.0901 -20/03 of 05.07.2021. Testing procedure. Control of metals, alloys and welded joints applying spectral analysis technique.

#### **I HEREBY ORDER**

To be issued a Certificate of accreditation with Registration № 290 OKC from 31.03.2022 valid until 31.03.2026 together with this Order, enclosed as an integral part thereof.

The Certificate of accreditation together with the enclosure shall be received by the Manager of KOZLODUY NPPN EAD, and the manager of the OKC or other authorized person in the office of the Executive Agency "Bulgarian Accreditation Service".

Upon receipt of the reissued Certificate the enclosure, the accredited body is obliged to return to the EA BAS the originals of the accreditation certificate with reg. № 290 OKC of 10.03.2021 and the Attachment - Accreditation Order № А 131/10.03.2021.

This Order shall notified to the legal entity / the sole-owner within 3 (three) days as from its issuance.

**Eng. IRENA BORISLAVOVA**  
Executive Director of EA BAS

