



ROSATOM



ROSSTANDART



ROSTECHNADZOR

TC 322 *NUCLEAR
TECHNOLOGY*
NATIONAL TECHNICAL COMMITTEE

THE USE OF MDEP PRODUCTS FOR RUSSIAN NATIONAL STANDARDS DEVELOPMENT

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EXECUTIVE SECRETARY OF TC 322

4th MDEP Conference on New Reactor Design Activities

London, the United Kingdom
12 – 13 September 2017

MDEP ACTIVITIES ON MECHANICAL CODES AND STANDARDS

MDEP
Mechanical Codes and
Standards Working Group

Convergence Board
(ex. Code Comparison Project)

**MDEP Code Comparison Project
Standards Development Organization (SDO) Agreement**

This Agreement, dated as of July 30, 2008, is made between the American Society of Mechanical Engineers (“ASME”), the French Association for the Design, Construction and Operating Supervision of the equipment for Electro Nuclear boilers (“AFCEN”), the Japan Society of Mechanical Engineers (“JSME”), the Korea Electric Association (KEA), and Canadian Standards Association (CSA), and the ASME Standards Technology, LLC (“ASME ST-LLC”).



MDEP PRODUCTS

TECHNICAL REPORTS

Mechanical Codes and Standards Working Group

MDEP 5R-CSWG-01 Technical

Multinational Design Evaluation Programme
 Technical Report – Codes and Standards working group
 Regulatory Frameworks for the Use of Nuclear Pressure Boundary
 Codes and Standards in MDEP Countries

Date: 16 September 2013
 Validity: **until next update or archiving**
 Version : Public version 1

MDEP Technical Report TR-CSWG-01

Related to: Codes and Standards Working Group

**Technical Report:
 Regulatory Frameworks for the Use of Nuclear
 Pressure Boundary Codes and Standards in MDEP
 Countries**

1

Multinational Design Evaluation Programme
 Technical Report – Lessons Learnt on Achieving
 Harmonisation of Codes and Standards for Pressure
 Boundary Components in Nuclear Power Plants

Date: 13 December 2013
 Validity: **until next update or
 archiving**
 Version : Public 1

MDEP Technical Report TR-CSWG-02

Related to: Codes and Standards Working Group

**Technical Report on
 Lessons Learnt on Achieving Harmonisation of Codes
 and Standards for Pressure Boundary Components in
 Nuclear Power Plants**

Participation

Countries involved in the MDEP working group discussions:	Canada, Finland, France, India, Japan, Korea, Russian Federation, South Africa, the U.A.E., the U.K., and the U.S.
Countries which support the present technical report	
Countries with no objection:	China and Sweden
Countries which disagree	
Compatible with existing IAEA related documents	Yes

Multinational Design Evaluation Programme
 Technical report
 TR-CSWG-03

Date: 14 April 2014
 Validity: **until next update or archiving**
 Version : Public 1

MDEP Technical Report TR-CSWG-03

Related to: Codes and Standards Working Group

**Technical Report
 FUNDAMENTAL ATTRIBUTES FOR THE DESIGN
 AND CONSTRUCTION OF REACTOR COOLANT
 PRESSURE-BOUNDARY COMPONENTS**

MDEP PRODUCTS

SUMMARIZING REPORTS AND COMMON POSITIONS

Mechanical Codes and Standards Working Group

Multinational Design Evaluation Programme Date: 16 March 2015
 Technical Report Validity: **until next update or archiving**
 TR-CSWG-04 Version: 9

MDEP Technical Report TR-CSWG-04

Related to: Codes and Standards Working Group

Technical Report:
**THE ESSENTIAL PERFORMANCE
 GUIDELINES FOR THE DESIGN AND
 CONSTRUCTION OF PRESSURE BOUNDARY
 COMPONENTS**

1

CP-CSWG-01_v1_Public

Multinational Design Evaluation Programme Date: 13 December 2013
 Generic Common Position Validity: **until next update or archiving**
 CP-CSWG-01 Version: 1

MDEP Generic Common Position CP-CSWG-01

Related to: Codes and Standards Working Group activities

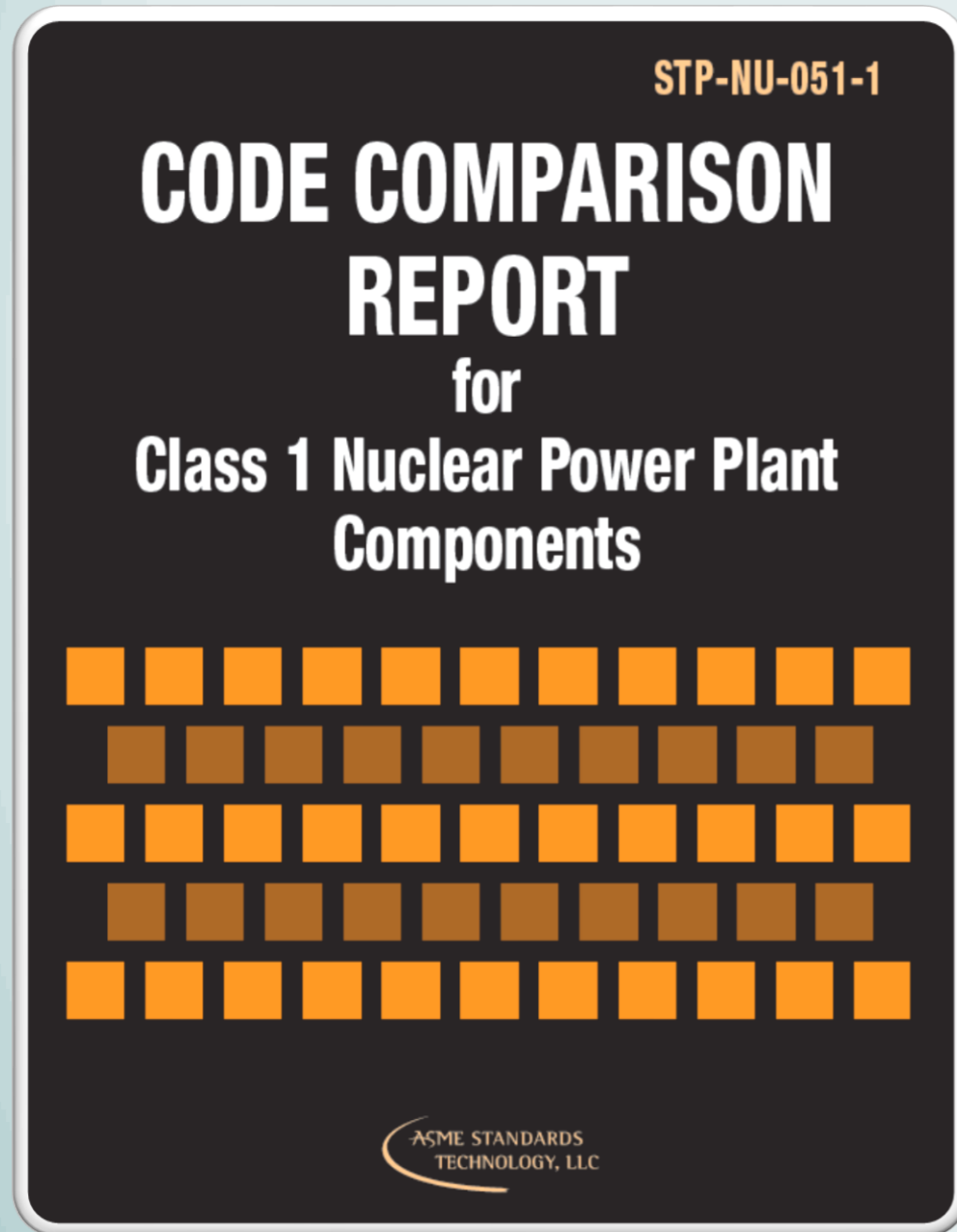
**Common Position on Findings from Code
 Comparisons and Establishment of a Global
 Framework towards Pressure-Boundary Code
 Harmonisation**

Participation

Countries involved in the MDEP working group discussions:	Canada, Finland, France, Japan, Republic of Korea, Russian Federation, South Africa, the U.A.E., the U.K., and the U.S.
Countries which support the present technical report	
Countries with no objection:	India, Sweden and China
Countries which disagree	
Compatible with existing IAEA related documents	Yes

MDEP-INITIATED PRODUCTS COMPARISON REPORTS

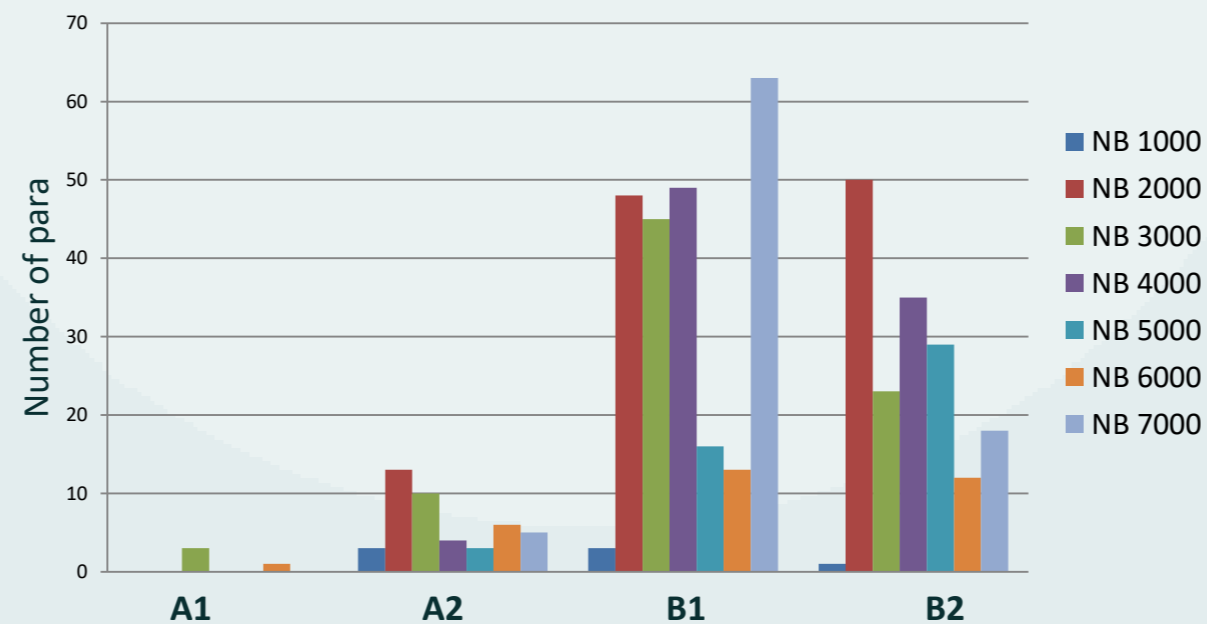
Code Comparison Project



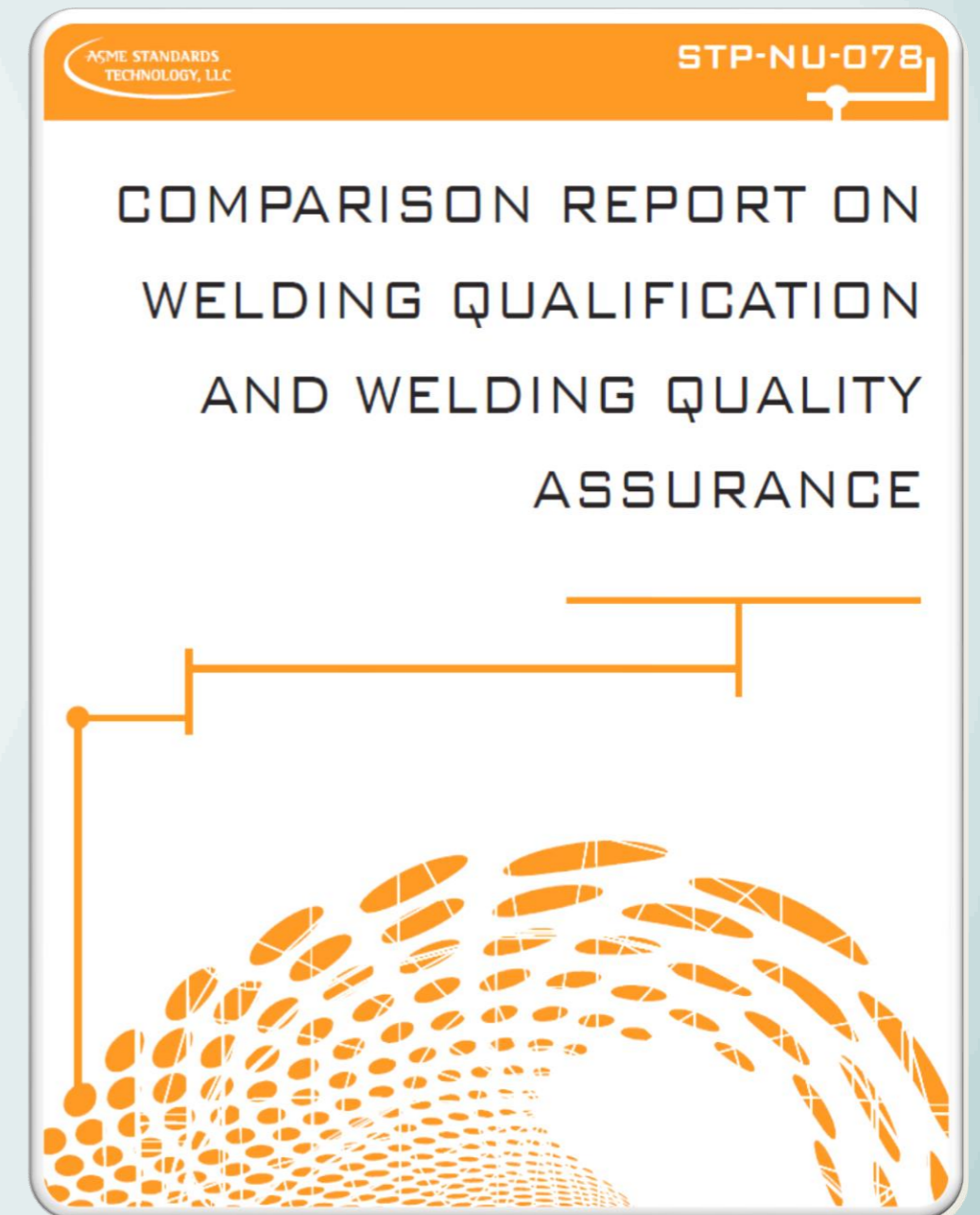
Line-by-line comparison

A1	Same
A2	Equivalent
B1	Not Addressed in Foreign Code
B1	Not Addressed in ASME BPVC
B2	Not Equivalent

ASME BPVC NB vs PNAE G-7



Convergence Board



RUSSIAN NATIONAL STANDARDS DEVELOPMENT STANDARDIZATION GOALS

- Increasing the safety level
- Increasing the quality of production
- Standardization of technical solutions
- Fulfillment the international requirements
- Facilitation the application of Russian production abroad

65 – 70 %



Harmonization

The Plan of the Realization of National Standardization Conception

RUSSIAN NATIONAL STANDARDS DEVELOPMENT INTERNATIONAL COOPERATION



TC 85

NUCLEAR ENERGY, NUCLEAR TECHNOLOGIES,
AND RADIOLOGICAL PROTECTION



MDEP *for new reactors*
MULTINATIONAL DESIGN EVALUATION PROGRAMME

CONVERGENCE BOARD



CORDEL

CODES & STANDARDS TASK FORCE



TC 45

NUCLEAR INSTRUMENTATION

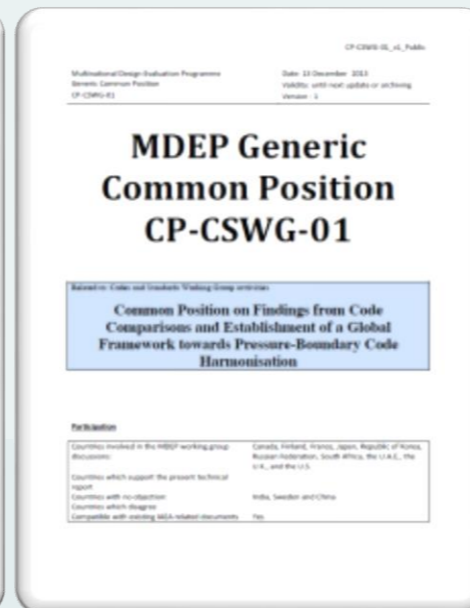
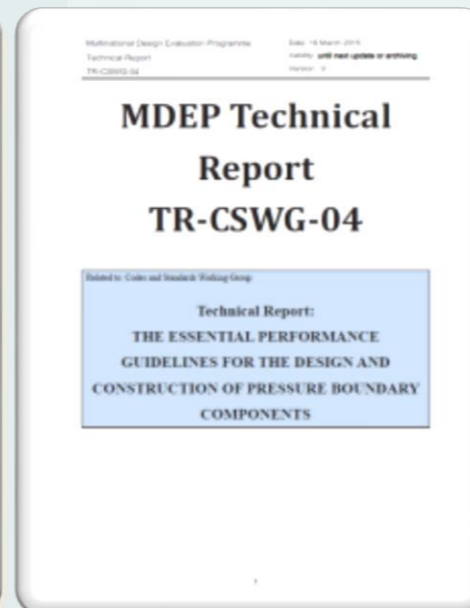
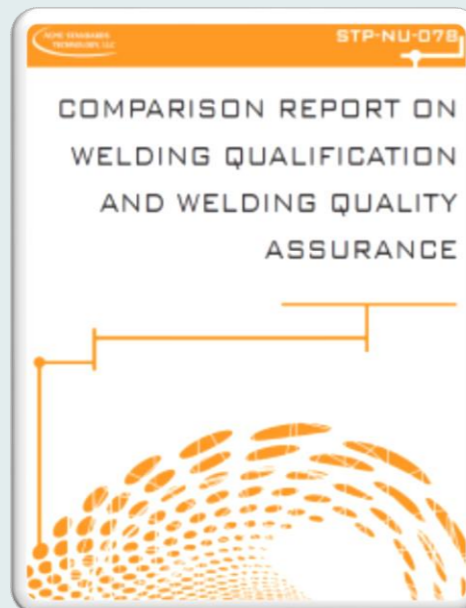
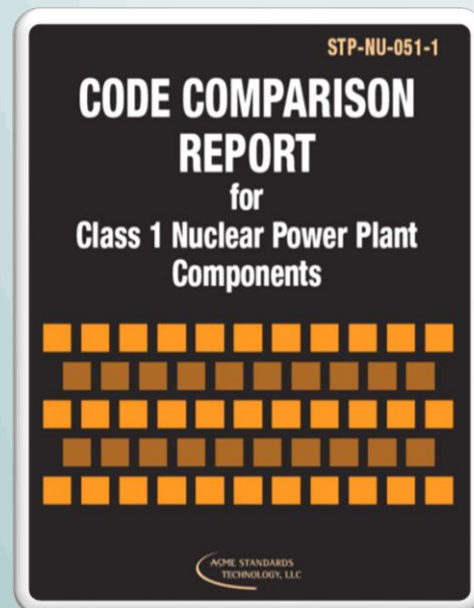


TC 322 Secretariat
VO "Safety"

RUSSIAN NATIONAL STANDARDS DEVELOPMENT CURRENT ACTIVITY

The working plan 2016 – 2018 of TC 322 “Nuclear Technology”

- ✓ *The set of standards on NDE*
- ✓ *The set of standards on Producing Technologies Qualification*
- ✓ *The set of standards on Conformity Assessment*
- ✓ *The set of standards on Strength Analysis*
- ✓ *The set of standards on Ageing Management and Remaining Life Determination*



under Convergence Board scope



TC 322 Secretariat
VO "Safety"

Thank you for your attention

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