

International Conference 2023

Rive Montparnasse, 44 boulevard de Vaugirard, 75015 PARIS

Information & registration at www.afcen.com

DESIGN AND CONSTRUCTION RULES FOR MECHANICAL COMPONENTS OF PWR NUCLEAR ISLANDS: RCC-M 2022 Edition

Technical sessions – March 29th, 2023 – 14h00 to 17h30

Objectives of the seminar:

RCC-M code, “Design and Construction Rules for Mechanical Components of PWR”, was first published in 1981, and since then, has been updated on a regular basis to incorporate the experience feedback and the evolution of industrial practices.

Whereas a new edition was published every three to seven years up to 2012, AFCEN Board decided to shorten the interval between the editions, with new editions in 2016, 2017 and 2018, in order to incorporate the results of the three-year AFCEN/RCC-M programme launched in 2015. The main objective of this programme was to facilitate the demonstration of the compliance of Nuclear Pressure Equipments designed and constructed according to the RCC-M code, with France's Nuclear Pressure Equipment Regulation and the European PED Directive.

After this major programme, new developments have been undertaken in the frame of the 2019-2022 editorial programme, with a focus on users and project needs, experience feedback and R&D results integration, practices update, regulations, and codes harmonization.

The aim of this session is to give an overview of the modifications introduced in the latest edition of the code, and to develop more specifically some technical themes and associated modifications:

- Update of the Fask Fracture Risk Assessment (Appendix Z G),
- Design of bolted flange connections: new rules in RPP (Probationary Phase)
- Welding – update of rules
- Non Destructive examinations: advanced UT techniques, digital radiography, Eddy currents examinations

Expected attendees include RCC-M users, as well as any mechanical components designer, manufacturer, operator, or other parties interested in the latest evolutions of RCC-M.

Lectures will be given by:

Manuela Triay, Framatome – RCC-M Subcommittee Chair

Stéphane Chapuliot, EDF R&D

Hubert Lejeune, CETIM - Bolted flange connections WG Chairman

Vincent Giommi/Alexandre Papadimopoulos, Altrad Endel

David Muller, Framatome –NDE Methods WG Chairman

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| 14h00 – 14h15 | RCC-M 2022 Edition: an overview | Manuela Triay |
| 14h15 – 14h20 | Questions & Answers | All |
| 14h20 – 14h50 | Update of Appendix Z G | S. Chapuliot |
| 14h50-15h00 | Questions & Answers | All |
| 15h00-15h30 | Design of bolted flange connections - RPP | H. Lejeune |
| 15h30-15h40 | Questions & Answers | All |
| 16h10 – 16h40 | Welding rules update | V. Giommi-A. Papadimopoulos |
| 16h40-16h50 | Questions & Answers | All |
| 16h50 – 17h20 | NDE Examinations | D. Muller |
| 17h20-17h30 | Questions & Answers | All |