This is a free page sample. Access the full version online.

Standard Recommendation
S.R. CWA 16519:2012

Design and Construction Code for mechanical equipments of innovative nuclear installations

© CEN 2012 No copying without NSAI permission except as permitted by copyright law.

This is a free page sample. Access the full version online.

S.R. CWA 16519:2012

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces:

This document is based on:
CWA 16519:2012

Published:
23 November, 2012

This document was published under the authority of the NSAI and comes into effect on:
23 November, 2012

ICS number:
27.120.01

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie

W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

This is a free page sample. Access the full version online.

S.R. CWA 16519:2012

CEN WORKSHOP AGREEMENT

CWA 16519

November 2012

ICS 27.120.01

English version

Design and Construction Code for mechanical equipments of innovative nuclear installations

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties, the constitution of which is indicated in the foreword of this Workshop Agreement.

The formal process followed by the Workshop in the development of this Workshop Agreement has been endorsed by the National Members of CEN but neither the National Members of CEN nor the CEN-CENELEC Management Centre can be held accountable for the technical content of this CEN Workshop Agreement or possible conflicts with standards or legislation.

This CEN Workshop Agreement can in no way be held as being an official standard developed by CEN and its Members.

This CEN Workshop Agreement is publicly available as a reference document from the CEN Members National Standard Bodies.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

© 2012 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

This is a free page sample. Access the full version online.

Contents

Page

This is a free page sample. Access the full version online.

This is a free page sample. Access the full version online.

Foreword

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties on 2012-07-03, the constitution of which was supported by CEN following the public call for participation made on 2011-02-03.

A list of the individuals and organizations which supported the technical consensus represented by the CEN Workshop Agreement is available to purchasers from the CEN-CENELEC Management Centre. These organizations were drawn from the following economic sector – Nuclear energy.

The formal process followed by the Workshop in the development of the CEN Workshop Agreement has been endorsed by the National Members of CEN but neither the National Members of CEN nor the CEN-CENELEC Management Centre can be held accountable for the technical content of the CEN Workshop Agreement or possible conflict with standards or legislation. This CEN Workshop Agreement can in no way be held as being an official standard developed by CEN and its members.

The final review/endorsement round for this CWA was started on 2012-07-14 and was successfully closed on 2012-09-14.The final text of this CWA was submitted to CEN for publication on 2012-10-11.

This document has been prepared by the CEN Workshop 64 (WS 64) “Design and Construction Code for mechanical equipments of innovative nuclear installations”, the secretariat of which is held by AFNOR.

A CEN Workshop (WS) is a structure and an associated process, introduced by CEN in the standardization era, which aims at bridging the gap between industrial consortia that produce de facto standards with the limited participation of interested parties, and the formal European standardization process which produces standards through consensus under the authority of CEN member bodies. CEN Workshops have a flexible structure that benefits from the openness and consensus that are key values of CEN. More detailed information about CEN Workshops is available in the CEN/CENELEC publications or internet site.

The main activity of a CEN Workshop is the development and publication of a CEN Workshop Agreement (CWA). This document constitutes a draft for the WS 64 CWA that will be submitted to public enquiry before its publication, according to the CEN-CENELEC procedure.

The operation of the Workshop was settled during a kick-off meeting held on 2011-02-03, in the Brussels on the basis of the Business plan proposed by AFCEN to launch the Workshop.

This CEN Workshop Agreement is publicly available as a reference document from the National Members of CEN: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Comments or suggestions from the users of the CEN Workshop Agreement are welcome and should be addressed to the CEN-CENELEC Management Centre.

This is a free page sample. Access the full version online.

Introduction

On 22 November 2007, the European Commission published its Strategic Energy Technology (SET) Plan, entitled 'Towards a Low Carbon Future'. This document emphasized the Europe needs to act jointly from now on, to sustainably deliver secure and competitive energy while limiting the growth of greenhouse effect.

With these objectives the European Commission has created a European Technology Platform, named Sustainable Nuclear Energy Technology Platform (SNETP), to promote nuclear energy as an answer to this issue. SNETP has set up a Task Force comprising research bodies and interested industrial partners to make up a dedicated Industrial Initiative: the European Sustainable Nuclear Industrial Initiative (ESNII).

In the SET-Plan, the European Industrial Initiatives (EII) constitutes key elements with the aims of strengthening industrial energy research and innovation and mobilizing the necessary critical mass of activities and actors in order to accelerate deployment of new technologies.

During its 7 March 2010 meeting, ESNII Task Force emphasized the importance of working on codes and standards for Generation IV reactor developments. Considering the already used RCC-MRx as basis to design the mechanical components for ASTRID and MYRRHA, the ESNII Task Force recommended bringing together all the relevant stakeholders in a CEN Workshop in order to develop, on the RCC-MRx basis, the European code for the design and fabrication of mechanical equipment for ESNII innovative nuclear installations.

As the publisher of the RCC-MRx code, the AFCEN was appealed to support this recommendation. Therefore, the AFCEN was the main proposer and chaired the Workshop.

The AFCEN is a joint venture, initially formed by FRAMATOME (now AREVA NP) and EDF, aiming at the development of rules governing the design, construction and operating supervision of the equipment items for electronuclear reactors. These rules are published under AFCEN copyright in specialized collections called codes. The RCC-MRx code is one of them. It is dedicated to the design and construction of mechanical components of innovative nuclear installations. It is the result of the merging of the RCC-MR code, oriented towards sodium fast breeder reactor construction, and the internal code developed by the CEA for research reactors. This code benefits from experience feedback on projects like Phenix and Superphenix. Apart from the GEN IV projects mentioned above, the code is also used for RJH, ITER or the FNR project in India.

This Workshop is supported by the European Commission (EC) as an exercise of Europeanization of the AFCEN RCC-MRx with three objectives:

— Integrate Modification Request from European experts and users with the aim to develop an European Code based on RCC-MRx,

— identify the fields of research and development to be explored for the development for a European design code.

The CEN/WS 64 participants were asked to submit modifications to the RCC-MRx code (2010 draft edition) and to process them in a similar way as what is currently done at AFCEN. To take into account the limited duration of the Workshop, it was decided to sort the proposed modifications in three categories:

— short-term modifications that can be considered for immediate inclusion into the RCC-MRx 2012 edition,

— medium-term modifications which need light pre-normative activities,

— long-term modifications which need the development of R&D programs before being in position to consider their inclusion in the code.

SAI GLOBAL

This is a free preview. Purchase the entire publication at the link below:

Product Page

Looking for additional Standards? Visit Intertek Inform Infostore

Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation