

Statement of Denis Buisine (chairman of the editing committee of AFCEN)

I would like to start with some words regarding AFCEN.

AFCEN is a standards development organisation. AFCEN publishes 7 nuclear codes:

- codes for the design and operation of mechanical components of PWR (RCCM, RSEM) and for FBR and experimental reactors (RCCMRx),
- electrical devices (RCCE),
- fuel (RCCC),
- civil works (RCCCW),
- prevention of fire (ETCF).

45 companies essentially from France, UK and China belong to AFCEN and modify the codes in order to take into account field experience.

Today, the AFCEN codes are used for building or operate a lot of reactors in the world. The benefit of harmonization between the codes is important but is connected with a convergence of the nuclear regulations. However, the recent code comparison on the class-1 nuclear power plant components in 2011 showed that convergence work is possible on technical issues (for example the use of ISO standards) especially to minimize future code differences. This is the reason why AFCEN is involved in the current actions of code and standard harmonization in CORDEL.

On the current convergence actions, our point of view is the following:

- Concerning NDE personnel qualification, consistent with the action of harmonization, the RCCM code was amended in 2014 to take into account the ISO 9712 standard in replacement of the European standard EN 473.
- Concerning non linear analysis design rules, work about the comparison of the codes is still in progress; AFCEN awaits the issuing of guidelines in order to proceed. AFCEN would like to promote new code and standard harmonization actions in CORDEL.
- For the qualification of welders, the ISO 9606 standard was published in 2013 and will replace the European standard EN 287-1 soon. AFCEN will introduce this new standard in the AFCEN and particularly in the RCCM. The mode of application of this new ISO standard for nuclear purposes could be the object of a convergence work.
- All codes must develop chapters for compliance with the AIEA standard GSR3. In this aim, AFCEN wrote a chapter in all the codes. We consider that this point could be a convergence work.