

## Session 3

# Standardisation of Supply Chain and Component Obsolescence

### Frédéric Beaud

---

***Frédéric Beaud:** representing AFCEN organization as Chairman of the Editorial Committee. In charge of Codes & Standards for the Nuclear New Build Engineering and Project Directorate at EDF.*

#### **A few words about AFCEN to start with:**

AFCEN is a Standard Developing Organization which has been publishing nuclear codes & standards for more than 35 years, covering the main disciplines (civil works, mechanical, electrical and I&C...) for the design and construction of Systems, Structures and Components (SCC) in Nuclear Power Plants (NPP). To date, experts from more than 70 companies get together in AFCEN committees and working groups to establish common rules for design and construction of NPP. AFCEN has an international status. AFCEN codes have been used for example in China as early as the 1980's, and for the EPR projects in Finland and in the UK typically. 12 of AFCEN company members are from European countries other than France.

#### **What situation is the nuclear industry facing today in Europe?**

It appears the lack of new build projects in Europe can make it difficult to maintain the capacity and capability of the suppliers to provide nuclear safety classified equipment. Domestic markets may not be big enough to sustain individual supply chain. At the same time, countries are often working with distinct regulations, standards and specifications that the supply chain may struggle to keep up with, because possibly too onerous, or not used enough and different from their main production processes. There is a risk for the operators to come short of suppliers and meet difficulties to maintain their NPP in a safe and efficient way.

#### **What role can AFCEN play to mitigate these risks?**

As illustrated with the KELPO project, one way to tackle this issue could be to procure commercial grade equipment, and gain acceptance they can be used in nuclear reactors and fulfil nuclear safety functions. Another way where AFCEN can bring value is to work on the nuclear standards in a joint effort so they can be accepted by the regulators, specified by the operators and used by the suppliers more widely across Europe and by a wider supply chain. This latter approach has the advantage to be based on standards already accepted for nuclear safety classified SCC, at least in some places, but there is obviously a need to make them applicable and have them authorized in various other European contexts. Ultimately both ways can meet, with a balance of requirements between conventional and nuclear standards.

In this perspective, AFCEN is supporting an initiative for a greater European integration of nuclear standards in the framework of the CEN Workshop 64 of the European Committee for Standardization. The CEN Workshop 64 has been running since 2011 and is entering a third phase in 2019. It constitutes a great opportunity to bring together all stakeholders (industry operators and suppliers, regulators and technical support, standardization experts) in a joint effort to reduce the fragmentation of industrial practices in the European nuclear industry.

The CEN Workshop 64 is made of 4 prospective groups in the fields of civil structures, mechanical components, electrical and I&C equipment. It operates as a forum where participants have the opportunity to share views and experience. AFCEN codes are used as a reference to support the discussions, which is also an opportunity to get more familiar with AFCEN codes. The various prospective groups are invited to put forward recommendations and requests for code modifications to AFCEN, as well as proposals for R&D programmes at European level. The CEN workshop 64 is a way to engage in a process where the regulators and operators would feel more comfortable in approving and using nuclear standards, recognized as relevant good practice elsewhere in Europe, when needed for spare parts typically. This objective should give access to a wider supply chain, helping the European operators with the maintenance of their existing plants (as an example, if accepted Czech Republic Regulator, a Czech operator could be procuring RCC-M grade equipment to manufacturers used to this standard elsewhere in Europe). This approach would also benefit nuclear new build projects (as an example, the design EPR reactors allows the use of standards different from AFCEN for class 3 pressure equipment, such as KTA or ASME).

**To reach this ambition**, the involvement of all stakeholders is crucial, from the industry key players (operators, suppliers) to the regulators, and including experts from standard developing organizations (KTA and UK experts for example). As we speak, topics of interest for phase 3 of the CEN Workshop 64 are being identified by the participants. So I invite you to join the CEN Workshop 64 to find a solution together for the benefit of the European nuclear industry and nuclear safety. It is key to support the key players in your respective countries, activities are being prioritized as time and resources are scarce for everyone.