

Regulatory Updates

Nuclear safety...

ASN appoints new Chief Inspector

November 2017



Christophe Quintin

On the 1st of November, the French Nuclear Safety Authority appointed **Christophe Quintin** as its new Chief Inspector.

He will lead ASN's actions specifically in the field of inspections, feedbacks, emergency and post-accidental situations, environmental safety, licenced organisations and physical protection.

 **For more information**
www.asn.fr

Intrusion of Cruas NPP by Greenpeace militants


November 2017

On November 28, at 7:40 AM, the French Nuclear Safety Authority (ASN) activated its emergency centre, after EDF triggered the "safety-protection plan" (*Plan sûreté-protection* – PSP) of Cruas NPP (south-central France).

This plan was triggered after the intrusion of several Greenpeace militants on the site of the nuclear power plant. These individuals were arrested by the police. This intrusion did not have any consequences on the installations' safety.

At 4:45 PM, EDF decided to lift its "safety-protection plan".

ASN who followed the evolution of the situation also decided to lift its emergency plan.

 **For more information**
www.french-nuclear-safety.fr

Detection of traces of ruthenium 106 in the ambient air in France

November 2017

As part of its duty of radioactivity monitoring nationwide, the French Institute for Radiation Protection and Nuclear Safety (IRSN) measured the presence of ruthenium 106 in south-eastern France, between the end of September and the beginning of October 2017, albeit at very low levels.

As ruthenium 106 is not normally detected in the air, its presence can only be linked to an uncontrolled release. The absence of any other artificial radionuclide rules out the possibility of a release from a nuclear reactor. However, a release such as this could come from a spent nuclear fuel reprocessing activity or the production of radioactive sources. As yet, no country has informed the International Atomic Energy Agency that it is the origin of this release, as required by the 1986 convention on the early notification of a nuclear accident.

IRSN carried out simulations to recreate the release from the observed measurement results and compared its results with those of its counterparts in Europe, working with different methods and models. All of these simulations show that the most probable origin of this release is the southern Urals, without it being possible to be any more precise.

The levels of atmospheric contamination by ruthenium 106 which were observed in France and the other European countries have no consequences for health and the environment and thus required no measures to protect the populations from the risk of inhalation. ASN also considered that there was no justification for implementing systematic checks on the radioactivity levels of foodstuffs imported into France and which could come from the southern Urals.

 **For more information**
www.asn.fr

ASN publishes the French national report on compliance with the Joint Convention

October 2017

The sixth triennial review meeting of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (called the "Joint Convention") will take place from 21 May to 1 June 2018 at the International Atomic Energy Agency (IAEA) headquarters in Vienna.

In this context, France submitted to the IAEA its national report on 23 October 2017. This report presents the state of implementation of the Joint Convention obligations by the French stakeholders. It also details the latest developments and prospects under this Convention, including developments in the regulatory framework, spent fuel and radioactive waste management policies, and the challenges of nuclear installation decommissioning.

The preparation of the French report was coordinated by ASN. In addition to the ASN services concerned, the Directorate-General for Energy and Climate (DGEC) and the Nuclear Safety and Radiation Protection Mission (MSNR) of the Ministry of Ecological and Solidarity Transition, the National Agency for Radioactive Waste Management (Andra), the main nuclear operators (EDF, Areva, CEA, ILL), and the Institute for Radiation Protection and Nuclear Safety (IRSN) contributed to drafting.

The Joint Convention Review Meeting will allow each of the 75 Contracting Parties to present their national report and to participate in the peer review of the other Contracting Parties.

This report is available for download at the ASN Website.

 **For more information**
www.french-nuclear-safety.fr

ASN gives a level 2 to an event leading to a risk of loss of heat sink for 29 nuclear reactors


October 2017

ASN gives a level 2 rating to a significant safety event regarding a risk of the loss of heat sink for 29 reactors. The reactor heat sink could be lost owing to the unavailability of the pumps of the reactor essential service water system (SEC) as a result of internal flooding following an earthquake-induced rupture of the piping supplying water to the fire protection network (JPP system) and the raw water filtration network.

The insufficient earthquake resistance of a JPP pipe was initially detected by EDF in the Belleville-sur-Loire NPP. Additional investigations requested by ASN and performed in early June 2017 revealed that several sections of these pipes were degraded, with thicknesses less than the minimum thickness required for earthquake resistance. This degradation is the result of corrosion which may have developed because of a lack of appropriate preventive maintenance.

EDF took thickness measurements on piping sections of other systems situated in the same areas as the JPP pipes, from early July to the end of September 2017, on all the EDF NPP reactors potentially concerned. Following this campaign and then the earthquake resistance analysis of the piping concerned, EDF declared on 10th October 2017 that 20 reactors were concerned by a risk of total loss of heat sink. This event is rated level 2 on the INES scale. Nine other reactors are concerned by a risk of partial loss of heat sink, which is a situation rated level 0.

Repairs have been initiated, under the supervision of ASN, on the piping, so that there is a secure SEC train for all the reactors concerned.

 **For more information**
www.french-nuclear-safety.fr

Follow-up to the IRRS international audit mission

October 2017

From October 1 to 9, ASN received an IAEA delegation responsible for follow-up to the Integrated Regulatory Review Service (IRRS) international audit mission carried out in 2014, concerning all of the activities regulated by ASN. The IAEA report on this mission, published by ASN in 2015, issued 46 recommendations and suggestions for which application and implementation was to be checked by the delegation present over the past few days.

With 40 recommendations and suggestions applied, the IAEA delegation concluded that France had significantly reinforced the framework of its regulation and oversight of nuclear safety and radiation protection. IAEA did however point out that ASN needed to demonstrate vigilance with regard to the question of human resources, in the light of the safety issues facing nuclear facilities in France.



Integrated
Regulatory
Review Service
IRRS

At the closing session of this follow-up mission, Mr. Rzentkowski, Director of the Division of Nuclear Installation Safety at IAEA, highlighted the fact that ASN is "an efficient nuclear safety and radiation protection regulatory body as proven by the conclusions of the mission". He also recalled that France is so far the first country to have completed two full IRRS cycles, after the respective missions of 2009 and 2014.

 **For more information**
www.french-nuclear-safety.fr

Transposition of Euratom BSS Directive

November 2017

The transposition of the Euratom BSS directive will modify the three following codes in force in France:


- the Labour Code (dose limits, RPE and RPO, radon in workplaces, intervention in emergency situation),
- the Public Health Code (radioactive substance adjunction, justification, optimization and reference levels),
- the Environmental Code (NORM, building materials, radon, polluted sites).

The related decrees - needed for achieving transposition - should be issued by end 2017 to early 2018. Several implementing orders are also under preparation and expected to be issued in 2018. Furthermore, major ASN decisions should be issued in 2018-2019, in particular for implementing the new graded approach in the authorization process.

Participation in HERCA activities

November 2017

ASN remains fully committed in HERCA Association activities which partially supersede bilateral and multilateral cooperation in the field of radiation protection. In particular, ASN is involved in each working group dealing with medical applications, emergencies, veterinary applications, research and industrial sources and practices and education & training. Furthermore, ASN leads the activities in the field of NORM, building materials and radon, chairs the working groups on medical applications and ensures the technical secretariat of the association.

 **For more information**
www.french-nuclear-safety.fr

French Nuclear Safety Authority
(Autorité de sûreté nucléaire)

15, rue Louis Lejeune - CS 70013
92541 Montrouge cedex -France

Tel.: +33 1 46 16 40 00
Email : info@asn.fr

www.french-nuclear-safety.fr