N#2 December 2017



# Regulatory Updates

### 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 <u>www.asn.fr</u>

### 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

# Nuclear safety...

#### "IRRS" international audit mission: ASN publishes the follow-up report

#### December 2017

From 1 to 9 October 2017, ASN received an IAEA delegation responsible for following up the Integrated Regulatory Review Service (IRRS) international audit mission carried out in 2014, covering all activities regulated by ASN. The IAEA report on this mission, published by ASN in 2015, made 46 recommendations and suggestions, the application and implementation of which was to be verified by the delegation.

ASN published on 19 December the report by the follow-up mission which it has just received from IAEA.



Integrated Regulatory Review Service

With 40 recommendations and suggestions applied (or applied "subject to the completion of the measures currently being implemented"), the delegation, chaired by Bill Dean (NRC -US nuclear regulatory authority), concluded that France had significantly reinforced the framework of its oversight and regulation of nuclear safety and radiation protection. IAEA however pointed out that ASN needed to remain vigilant with regard to the human resources issue, given the safety implications of the nuclear facilities in France and should continue to draw up guidelines for the review and updating of the texts regulating safety. The mission also suggested to ASN that it promotes the broadest possible adoption of a safety culture internally and specifies the conditions for classification of emergency situations by the licensees.

The report is available at the ASN website.

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

# ASN allows restart of the reactors of the Tricastin NPP

#### December 2017

With the support of IRSN, ASN examined the data provided by EDF to demonstrate the seismic resistance of the Donzère-Mondragon canal embankment which protects the Tricastin NPP. ASN considers that, following the investigations and repairs carried out by EDF, the condition of the embankment allows the restart of the EDF reactors and gave its consent for the restart of reactors 2, 3 and 4 (reactor 1 remains shut down as EDF intends to carry out maintenance on it).

On 27 September 2017, ASN ordered temporary shutdown of the Tricastin NPP due to the risk of failure of a 400 metre long portion of the Donzère-Mondragon embankment in the event of an earthquake. The assessments carried out showed that the flooding that would result from failure of the embankment would have caused a nuclear fuel melt accident in the four reactors of the Tricastin NPP and would have made deployment of the on-site and off-site emergency management resources particularly difficult.

EDF strengthened the portion of the embankment concerned, after having carried out geotechnical surveys to obtain a more detailed characterisation of its composition. The assessment carried out by IRSN at the request of ASN on the strengthened embankment confirms that there would be no failure in the event of a safe shutdown earthquake, which is the largest earthquake studied in the nuclear safety case.

ASN has initiated a process to issue prescriptions, which will be the subject of a public consultation, to regulate the steps to be taken by EDF, in particular the enhanced monitoring of the embankment, the deployment of permanently pre-positioned equipment and the final strengthening of the embankment, as rapidly as possible, so that it can withstand the extreme earthquake.

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

## ...and Radiation Protection

#### 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 (called Management 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 is available for download at the ASN Website.

#### 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 southeastern 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 the early 1986 convention on 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

#### 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

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