French Nuclear Safety Authority

N#15 February 2019

Regulatory Updates

Nuclear safety...

ASN serves EDF with formal notice on Flamanville EPR equipment

February 2019

In a resolution of 25 February 2019, ASN served EDF with formal notice to produce and save proof of qualification of the Flamanville EPR reactor equipment.

In accordance with the facility's creation authorisation decree, EDF must qualify equipment important for nuclear safety^[1] on the Flamanville EPR reactor. The purpose of qualification is to demonstrate that the equipment installed in the facility is able to function in all the conditions in which it is used (temperature, humidity, radioactivity, etc.), more specifically in the event of an accident. This qualification is primarily based on studies and tests. It must be documented and traceable as required by the order of 7 February 2012 setting the general rules for basic nuclear installations (known as the "BNI order") and must be demonstrated prior to commissioning of the facility.

Following an inspection on 24 October 2017, ASN informed EDF that the qualification of the equipment depended in particular on the processing and lifting of the qualification reservations^[2] identified by EDF and its suppliers. The ASN inspectors had more particularly observed that the traceability of the processing and lifting of these reservations was insufficient. During the course of a new inspection carried out by ASN on 5 December 2018, ASN observed the same shortcomings.

Since then, EDF has undertaken to comply with the provisions of the "BNI order" and the actions it proposes taking are considered by ASN to be satisfactory. ASN nonetheless decided to serve formal notice in order to ensure close oversight of these actions, so that equipment qualification is demonstrated within sufficiently good time prior to commissioning of the Flamanville EPR reactor.

ASN will periodically check the progress of the action plan implemented by EDF.

[1] This concerns mechanical (pumps, valves, etc.) or electrical (relays, circuit-breakers, etc.) equipment.

[2] Technical points to be resolved before being able to declare qualification of the equipment.



For more information www.frenchnuclear-safety.fr

ASN defines the quality assurance requirements for certain medical practices that use ionising radiation *February 2019*



In France, medical applications represent the primary source of artificial exposures of the public to radiation. This ionising medical exposure is increasing, mainly due to the increased number of examinations using computed tomography CT scanners. In order to control the doses delivered to patients undergoing medical imaging examinations, and thereby contribute to enhanced safety for the patients, ASN is defining new quality assurance requirements in medical imaging.

ASN resolution 2019-DC-0660 of 15 January 2019 defines the quality assurance requirements for medical imaging involving ionising radiation, that is to say in nuclear medicine for diagnostic purposes, in dental and conventional radiology, in computed tomography and for fluoroscopyguided interventional practices. It obliges the person responsible for the nuclear activity to define a quality management system and to provide details:

- On the processes, procedures and work instructions associated with operational implementation of the two general radiation protection principles, namely justification of procedures and optimisation of doses;
- On the experience feedback process, by stepping up the recording and analysis of events that could lead to accidental or unintentional exposure of persons during medical imaging procedures.

ASN moreover asks the medical professionals to produce guides to facilitate application of this resolution in each medical imaging facility, by adapting the content and form of the quality management system to the risks induced by the activities practised.

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

ASN publishes in English its recommendations regarding the transport of radioactive substances

AUTORITÉ DE SÛRETÉ

NUCLÉAIRE

February 2019

The transport operations of loading of radioactive substances and packages are namely: design, manufacture, maintenance and repair of packages, consigning, loading, carriage, including in-transit storage, unloading and reception at the final destination. ASN is responsible of monitoring application of the regulations for the safe transport of radioactive materials for civil uses in France.

In this framework, ASN publishes, through these two guides, its recommendations for professionals (licensees, consignors, consignees, carriers...) in order to explain regulatory objectives and to describe, where appropriate, the practices that ASN considers satisfying regarding these transport operations. With the aim to share information at an international level, two ASN guides have been translated in English:

Guide 27: Stowage of radioactive packages, materials or objects for transportation:

• Secure stowage of packages is an important aspect of the defense in depth approach which serves to ensure the safety of transport operations. This is why ASN, in consultation with all professionals of the nuclear field, wrote this guide and gives its recommendations to check the quality of stowage of radioactive packages, materials and objects for transportation.

Guide 34: Implementation of the regulatory requirements applicable to on-site transport operations:

• The internal transport operations of dangerous goods conducted on the private roadways of a nuclear site, that is to say a site accommodating one basic nuclear installation (BNI) or more, are generally not subject to the regulations applicable to the transport of dangerous goods on the public highway. The purpose of this guide is to set out ASN recommendations to help BNI licensees to take into account the risks that the on-site transport operations represent for the interests mentioned in article L. 593-1 of the Environment Code.

ASN guides are written by ASN. Although these guides are not legally binding, they imply an interpretation of law or define the modalities to reach the objectives set by the regulations.

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

...and Radiation Protection

ASN expresses its comments and expectations on the occasion of its New Year's greetings to the press January 2019

On the occasion of the New Year, ASN, through its Chairman Mr. Bernard Doroszczuk, presented its greetings to the press on 29 January.

The ASN Chairman emphasised the fact that in 2018, "nuclear safety and radiation protection were kept at a satisfactory level".

He drew the audience's attention to:

- The difficulties encountered in the recovery and packaging of legacy waste and in decommissioning operations (projects completed behind schedule, postponements, changes in strategy after several years of study).
- The large number of deviations in installation compliance with their baseline safety requirements, even if "the licensees are aware of the need to improve both management of installation ageing and maintenance operations".
- The persistence, in the medical field, of recurring events rated level 2 (dose error or laterality error for example), as well as the fact that insufficient account is taken of the risks linked to fluoroscopy guided interventional practices. "ASN will take initiatives in this area in 2019, together with the professionals concerned".

For the future, Mr. Doroszczuk more particularly expressed three expectations:

- Greater anticipation from all stakeholders in the nuclear and medical sector. "It is now rare that projects are completed in less than 10 years;"
- Maintaining sufficient safety margins in industrial projects, at a time when the desire for optimisation may seek to erode these margins;
- Mobilisation of the nuclear sector to "built around maintain skills professional training, in order to achieve the required level of quality safety". The difficulties and encountered in the construction of new facilities, in particular with regard to conventional industrial welding, operations such as electromechanical work, or even non-destructive testing, have given rise to "doubt concerning the sector's ability to carry out major works relating to the continued operation of the fleet, decommissioning, or the construction of new reactors".

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

ASN appointed a new Chairman and a new Commissioner

November and December 2018

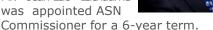


By decree of the President of the Republic, dated 13 November 2018, Mr. Bernard Doroszczuk was appointed Chairman of ASN for a period of 6 years.

The professional career of Mr. Doroszczuk

has been entirely devoted to the oversight of high-risk activities and installations, in both the public and private sectors, where he has held several positions of responsibility directly related to nuclear safety and radiation protection. In particular in 1997, he joined ASN, taking charge of internal coordination of the second periodic safety review of the EDF 900 MWe reactors and, from 2003 to 2010, he acted as ASN regional representative for nuclear safety oversight of the NPPs in the Centre region and of the CEA centers in the Ilede-France region. In 2010, he was tasked with setting up the Regional and Interdepartmental Directorate for the Environment and Energy for the Ile-de-France region. He ran this Directorate until 2013 and then joined the French Accreditation Committee (COFRAC) as CEO.

In addition, by decree of the President of the Republic, dated 21 December 2018, and further to а proposal from the President of the National Assembly, Mr. Jean-Luc Lachaume was appointed ASN



Graduated as an Engineer from the French Naval Academy and as a Nuclear Engineer from Military Nuclear Energy Applications Engineering School, Mr. Lachaume began his career in the French Navy as Naval Officer, performing, between 1983 and 1991, several tours of duty on submarines. He subsequently occupied a position of expert at the Nuclear Security Office of the Naval Staff in Paris from 1992 to 1998.

In 1998 he joined ASN to take charge of a sub-directorate tasked with crisis management, inspection organisation and the environment. In 2004 he was appointed Deputy Director-General of ASN.

Then, in 2017 he joined the French Institute for Radiation Protection and Nuclear Safety (IRSN) as Director Delegate for crisis management, reporting to the Director General.

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

ASN renews the Advisory Committees for nuclear safety and creates a new Advisory Committee for "Decommissioning"

December 2018

In the exercise of its duties, ASN coordinates technical investigations which lead to resolutions and opinions. These investigations draw on internal and external expertise, this latter being primarily the responsibility of IRSN, in its capacity as the ASN technical support organisation.

For the more complex subjects, ASN also has recourse to Advisory Committees of experts (GPE) reporting to the ASN director general.

Each GPE has about thirty members. In order to ensure the competence of these Committees, ASN calls on various expert assessment organisations, licensees, manufacturers and carriers, university research laboratories, inspection agencies, civil society organisations and national and foreign administrations, with the aim of identifying and proposing candidate experts.

ASN renewed the composition of the five Advisory Committees for nuclear safety for a period of four years, their mandates having expired:

- The Advisory Committee for Nuclear Reactors (GPR),
- The Advisory Committee for Laboratories and Plants (GPU),
- The Advisory Committee for Waste (GPD),
- The Advisory Committee for Transports (GPT),
- The Advisory Committee for Nuclear Pressure Equipment (GPESPN).

In total, just over half the experts appointed are new members.

ASN also wished to set up a new GPE for activities related to decommissioning (GPDEM), to deal with the growing challenges of the decommissioning of nuclear facilities, which are distinct from those concerning the operation of facilities in service or the management of nuclear waste. Its members were appointed for a four-year mandate by decision of the director general dated 30 October 2018.

In addition, there are two other GPEs reporting to the ASN director general: one for medical exposure (GPMED) and the other for environment and radiation protection (non-medical - GPRADE). The mandate of their members, appointed in 2016, runs until 2020.

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 : <u>info@asn.fr</u>