Regulatory Updates



ASN asks for nuclear safety concerns to be placed at the centre of the energy policy decisions

May 2022

The safety of nuclear facilities and radiation protection in the medical, industrial and radioactive substance transport sectors remained at a satisfactory level in 2021, very much in line with the level observed in 2020.



© ASN/Presentation of 2021 ASN's Report to the OPECST

On May 17, ASN presented its Report on the State of Nuclear Safety and Radiation Protection in France in 2021 to the parliamentarians of the Parliamentary Office for the Evaluation of Scientific and Technical Choices (OPECST). This report has been sent to the offices of the President of the Republic, of the Prime Minister and of the Speakers of the Senate and the National Assembly. It is published on www.asn.fr.

In the nuclear power sector, EDF had a particularly high industrial activities work load following the disruptions caused by the Covid-19 crisis in 2020. Despite this, ASN considers that the quality of operation of the EDF facilities has remained satisfactory and progress has been observed in radiation protection after two years of decline. Notable progress has been made in the Flamanville EPR completion work. reactor authorising commissioning, substantial work must still be carried out on numerous subjects which have been identified for several years now and present significant safety challenges.

EDF must moreover learn the lessons from the experience acquired on the EPRs put into service in Finland and China, and in particular the fuel anomalies affecting the core of the Taishan reactor. The end of 2021 was marked at EDF by the unexpected discovery of stress corrosion cracks

Nuclear safety...

on the circuits connected to the main pipes of the primary system of several reactors. This is a serious event and the strategy for dealing with it is currently being examined by ASN.

The level of safety of the facilities operated by Orano remained generally satisfactory in 2021, with progress in the management of complex projects such as the retrieval and conditioning of legacy radioactive waste. This progress must be widely extended and consolidated for all sensitive projects. The malfunctions at the Mélox plant are causing faster than anticipated saturation of the storage capacity for plutonium-bearing materials, requiring the licensee to take urgent measures in 2022.

The safety of the facilities operated by the CEA has remained at the level observed in 2020. The CEA must clarify its view regarding the continued operation of some of the old facilities. It must also tighten its control of projects, particularly those concerning the decommissioning of definitively shut down facilities or the retrieval and packaging of legacy waste.

Broadly speaking, all the nuclear licensees must make further progress in control of the fire risk, emergency management organisation and resources, and verification of the conformity of their facilities in view of the phenomena of ageing, deterioration and equipment corrosion, which are tending to increase.

The work to draw up the National Radioactive Materials and Waste Management Plan (PNGMDR) 2021-2025 has been completed. ASN considers that the draft plan meets the key objective of enabling the necessary decisions to be taken before it expires, so that safe management routes are operational for all types of radioactive waste in the coming 15 to 20 years. It nevertheless considers that particular attention must be paid to compliance with the deadlines for each of the actions planned for in the future PNGMDR.

Lastly, regarding oversight of the medical sector, ASN considers that despite the impact of the Covid-19 pandemic on the functioning of the health services, the state of radiation protection in 2021 is comparable with that of 2019 and 2020.

What emerges more specifically from 2021, and from the second half of the year in particular, are the industrial weaknesses that affect all the nuclear facilities and the ongoing debate regarding the choices of energy policy and the place of nuclear power in these choices.

In this context, during the presentation of the report to the OPECST, the ASN President, Bernard Doroszczuk, shared four convictions with the parliamentarians:

• 1/Today the French electrical system must cope with an unprecedented dual vulnerability in terms of availability which affects the "fuel cycle" facilities as much as the nuclear reactor fleet. These vulnerabilities, which result chiefly from the absence of room for manoeuvre and a lack of foresightedness, must serve as a lesson for the nuclear sector as a whole and for the public authorities.



...and Radiation Protection

- 2/Nuclear safety concerns must be placed at the centre of the energy policy decisions, on the same level as the concerns for producing decarbonised energy by 2050. In the next 5 years EDF must question and prove individually the ability of the oldest reactors to continue functioning beyond 50 or even 60 years, and by the end of this decade at the latest the Government should rule on whether the reprocessing of spent fuels shall be continued beyond 2040 or not.
- 3/The prospect of an energy policy comprising a long-term nuclear component must be accompanied by an exemplary management policy for waste and legacy nuclear situations. Such a policy implies taking decisions to ensure that all types of waste have operational management routes and that the nuclear licensees make greater efforts to conduct the legacy nuclear waste retrieval and packaging projects under their responsibility within the planned time frames.
- 4/The new policy energy perspectives, whatever they are, imply a considerable industrial effort to meet the industrial and **safety challenges.** If nuclear power is included among the choices made to ensure a decarbonised energy mix by 2050, the nuclear sector will have to set up a true "Marshall Plan" to render this prospect industrially sustainable and to have the skills that enable it to cope with the scale and duration of the projects.

During this presentation, the exchanges with the members of Parliament more specifically concerned:

- The phenomenon of stress corrosion and the problems associated with ageing of the facilities;
- Waste management and storage capacities;
- The impact of global warming on the functioning of the nuclear power plants;
- The role of ASN and consolidation of its independence;
- Consolidation of skills in the nuclear

To be consulted: ASN Report (only in French) on https://www.asn.fr/l-asn-informe/publications/rapports-de-l-asn/la-surete-nucleaire-et-la-radioprotection-en-france-en-20213

ASN is renewing its Advisory Committees for nuclear safety: call for candidate applications

Iune 2022

In order to prepare its resolutions which have the most significant nuclear safety and radiation protection implications, ASN requests opinions and recommendations from **Advisory Committees of experts** (GPE) that report to it. There are currently six GPE covering nuclear safety and one covering radiation protection (GPRP).

ASN is renewing the six GPE covering nuclear safety this year:

- waste (GPD),
- decommissioning (GPDEM),
- nuclear pressure equipment (GPESPN),
- nuclear reactors (GPR),
- •transports (GPT),
- laboratories and plants (GPU).

Duties of the Advisory Committees of Experts

These GPE are consulted by ASN so that they can shed light on technical subjects with the most significant potential implications and consequences, generally drawing on an expert assessment from IRSN, Institute for Radiation Protection and Nuclear Safety (IRSN), ASN's technical support organization, or from ASN's technical departments. The GPE assimilate the data made available to them before issuing an informed and independent opinion. Their opinions are published on www.asn.fr.

The GPE provide ASN with an expert opinion developed from collective discussions between experts and the perspective necessary for decision-making. They act as guarantors of nuclear safety and radiation protection doctrine and contribute to its development. They can also be involved in regulatory changes.

Functioning of the Advisory Committees of Experts

The functioning of the GPE is described in the internal rules of procedure of both ASN and the GPE.

Each GPE meets several times a year to prepare the opinions transmitted to

ASN. The GPE can also meet to hold information sessions and may be required to take part in field visits.

GPE members are appointed for their competence, whether cross-disciplinary in nuclear safety and radiation protection fields, concerning certain types of facilities or activities, or specialized in a particular technical field

They come from civil society, industry, technical support organisations, university research laboratories, foreign safety regulators, etc., and they are appointed individually. They do not represent the structure from which they come. In this respect, the GPE are not pluralistic groups.

GPE members are appointed for 4 years by decision of ASN Director General. They carry out their activities on a voluntary basis and their duties can be terminated at their own request or if so decided by ASN, with full reasons being given.

The member selection and appointment process adopted by ASN aims to ensure not only the complementarity of their fields of expertise, but also their independence and the transparency of their decision-making process.

Procedure for candidate applications

The GPE must be duly constituted before 31 December 2022.

The application is also open for French speaking foreign experts.

The documents making up the candidate application file are:

- application form,
- table of skills,
- specimen CV,
- declaration of interests.

Once completed, these documents shall be sent to asn.candidaturesGPE@asn.fr no later than 31 august 2022.

To find out more:

- <u>Section related to GPE</u> on ASN website
- GPE Internal Rules of Procedure
- ASN Internal Rules of Procedure

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