

With 21 of EDF's 58 French reactors presently shut down, either for scheduled maintenance or unplanned outages, Le Monde reported the utility could be losing as much as €1 million (\$1.1 million) per day for each of the units currently off line.

Fake Certifications A Global Problem

The issue of potentially fake or inaccurate documents used in the certification of reactor components supplied by Le Creusot is only one of the issues being investigated by ASN.

This could be a growing problem for the nuclear industry, according to Lloyds Register Inspection Services (LRIS).

In a presentation made to Strategic Communications' Fourth European Nuclear Power Briefing on Oct. 25 in London, Lloyds Register Energy head of nuclear development King Lee highlighted the problems of managing what are termed counterfeit, suspect and fraudulent items (CFSI) in the nuclear supply chain.

The increasingly-globalized procurement paths for key nuclear equipment had provided increased opportunities for CFSI, with evidence more may be entering the supply chain.

He gave as the principal example problems encountered by Korea Hydro & Nuclear Power (KHNP), which launched an extensive investigation into the authentic origin of items provided from overseas after discovering four years ago that some of its suppliers had furnished components by falsifying certificates for commercial grade item dedication.

The firm, a subsidiary of Korea Electric Power Corp., found falsification of equipment qualification certificates for control cables.

Some of Korea's 23 reactors had to be shut down and five units under construction had to be delayed, although three have now been commissioned.

KHNP then engaged LRIS under a two-year contract to provide independent verification services for safety equipment.

King said the firm identified "a large number" of technical quality issues, although he did not refer to the October 2013 indictment of a former KHNP chief executive and some 100 staff for falsifying nuclear component safety documents.

Subsequently, Korea strengthened its regulatory procedures for

vendor inspection and improved the management of equipment testing entities.

He concluded that nuclear facilities "need to be aware and put processes in place to detect and report" suspected CFSIs, as these could have a significant impact on operations and safety.

Haye Defends Hinkley Strike Price

Other conference speakers analyzed the current state of play for new LWR reactors and the prospects for successful commercial deployment of SMRs.

One of the most interesting, and largely unscripted, presentations was made by Hergen Haye, a senior civil servant engaged in nuclear policy issues for over ten years, who ended his government career as Office for Nuclear Development chief executive.

Haye made several pertinent points about the contract strike price of £92.50 (\$112.85) per MWh negotiated between the government and EDF's U.K. subsidiary EDF Energy, which will operate HPC.

He noted that it will only be paid when Hinkley starts operating and stay in effect for 35 years, while the plant is likely to operate for considerably longer than that.

Particularly relevant was the policy in a 2008 white paper which for the first time set out officially that nuclear had a part to play in the energy sector. This stated that new build nuclear was to be developed by the private sector without public subsidy.

This was slightly varied in an October 2010 statement to parliament that nuclear could receive any support that is also available to other low-carbon energy technologies.

But this meant that EDF had to price in all of the project risk into the contract, because government policy at the time was not to provide a subsidy for construction cost or share any of the risk.

Given that the commercial agreement between the government and EDF was developed under that no-subsidy policy, Haye said that £92.50 (\$112.85) per MWh was quite competitive.

While it was well above the current wholesale electricity price at the time, the situation could be quite different by the mid-2020s when HPC is due to start operating. ●