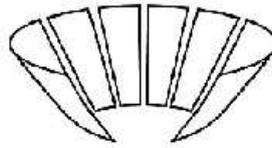


INN**International Nuclear Network**

Empowering the world.

Dear Reader,

Welcome to the May 2016 edition of the International Nuclear Network (INN) newsletter.

This edition covers developments over the last month. Alarming a German nuclear plant has suffered a cyber attack. INN joined with WEG to look at how governments are addressing these threats which are multiplying by the day. A London dinner for senior diplomats was hosted this week by Simmons&Simmons. Among our expert contributors was Dr Jack Caravelli who is a former member of the US National Security Council and an adviser to the White House on nuclear matters.

As EDF has yet to confirm its commitment to Hinkley there is news that the company is pitching for the world's biggest nuclear project in India. Even more amazing is the nuclear and defence agreement made during President Obama's recent visit to Vietnam.

We hope that you enjoy this newsletter and find it very informative. We welcome any comments, feedback and inquiries which you may have. If you would like to contribute an article or commentary to future editions please let me know. Also, please let us know of anyone who would like to receive this newsletter and future ones.

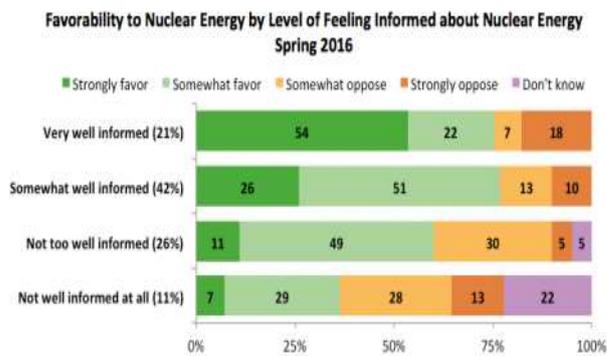
Kind regards,
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Viruses detected in Germany nuclear facility

27 April 2016

A number of computer viruses infiltrated into multiple computers inside a nuclear power plant in Bavaria, Germany. The malware had the potential to steal important data such as login credentials and to permit attackers to hack the computers. RWE, a Germany electric utilities company, reported no threat to the plant and its personnel. However, while the issue of digital hackers could be addressed,

Oda Becker, an expert on nuclear plants, argued that German nuclear plants remain vulnerable to terrorist attacks coming from other sources, particularly from suicide bombers. [Read more](#)



Differences in public opinion on nuclear energy

27 April 2016

Three different surveyors conducted polls on American public opinion on nuclear energy. All three polls showed different results. Gallup's 2016 Environmental poll found that 44% favoured nuclear and 56% opposed it—the first time showing the majority opposing nuclear energy. The University of Texas at Austin found that 39% are generally in favour, 26% are generally in opposition, and 35% neither support nor oppose. The Nuclear Energy Institute found that 67% favoured nuclear energy and 29% opposed it. These differences may be due to the fact that most Americans do not feel well-informed about the subject. [Read more](#)

Belgium to distribute iodine pills in case of nuclear disaster

29 April 2016

Belgium is planning to give iodine pills to its citizens due to concerns of a potential nuclear disaster. This policy might be a response to the recent Fukushima disaster in 2011, as well as the more recent terrorist plots to build a “dirty nuclear bomb”. The pills are said to aid in limiting the effect of radiation on the body. Radiation causes radioactive iodine to gather in the thyroid gland and would decay for a long time, thus damaging internal organs. The pills would fill the thyroid with stable iodine which is rather harmless. [Read more](#)



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Chinese and Russian nuclear firms might be better at project financing

3 May 2016

According to U.S. Energy Secretary Ernest Moniz, Chinese and Russian nuclear energy companies such as CGN and Rosatom are better at financing civil nuclear projects. Because they are state-owned, they “can rely on political and financial support to develop projects in countries seeking cleaner and cheaper power generation.” [Read more](#)

SA’s Nuclear program will not be rushed

12 May 2016

According to Tina Joemat-Pettersson, South Africa’s Energy Minister, the nuclear energy expansion programme remains vital to South Africa’s future energy mix and the country’s economy. There is much confidence that the programme would provide more jobs and help reduce carbon emissions. Nevertheless, the National Development Plan requires the government to “undertake detailed investigations prior to making a final decision on whether to deploy the new build programme,” which include economic reports that would help to confirm the market appetite for the programme. [Read more](#)



EDF proposes deal for 6 nuclear reactors in India by the end of the year

12 May 2016

By the end of the year, EDF will deliver a proposal to the Indian government to build six nuclear reactors. In particular, the company is required to submit a technical and economic proposal for six EPR nuclear reactors. The large scale of the project thus makes it the world’s biggest nuclear deal. As shown in an agreement with Nuclear Power Corp. of India Ltd., EDF plans to build the reactors at Jaitapur in western India. [Read more](#)

Lord Howell: China may take over Hinkley Point civil nuclear project

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12 May 2016

Lord Howell told the House of Lords that China has intentions of taking over the Hinkley Point project if EDF backs out. It is worth noting that state-owned China General Nuclear Power Corporation (CGN) has already “committed itself to taking a third stake” in the new reactors planned by EDF, but also plans to build a new plant at Bradwell in Essex. Furthermore, opposition from inside and outside EDF has made



many to doubt whether EDF will continue the Hinkley project. China might use its own local designs for building new reactors in Hinkley Point, or take over the French European Pressurized Reactor designs produced by Areva, EDF’s French partner.

[Read more](#)



Chinese reply to Lord Howell: If EDF drops out, we will not continue with the project

13 May 2016

In reply to the concerns of a potential “Chinese takeover” of the Hinkley Point civil nuclear project, the China General Nuclear Power Corporation (CGN) and the Department of Energy and Climate Change

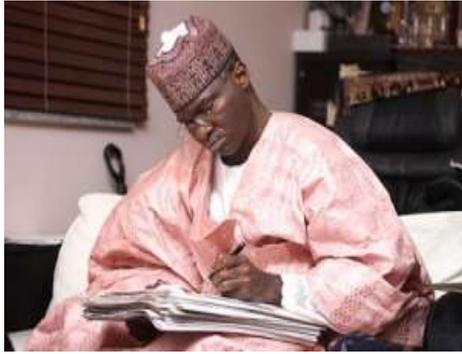
stated that CGN has “no independent plans to build reactors at Hinkley Point C.” This denies Lord Howell’s previous comment that the Chinese plan to build two smaller reactors on the Hinkley C site and finish it ahead of the present plan. [Read more](#)

UAE’s Nawah Energy Company to operate the country’s first nuclear power plant

17 May 2016

The Emirates Nuclear Energy Corporation (ENEC) decided to found a new subsidiary company called Nawah Energy Company. The company has a mandate to operate and maintain all four nuclear power units at Barakah, all of which are expected to be delivered by 2020. Each unit would generate 1,400 megawatts. Furthermore, Nawah would allow ENEC “to focus on the delivery of strategic issues” in relation to UAE’s civil nuclear projects. [Read more](#)





Nigeria “ready for nuclear energy”

19 May 2016

Babatunde Fashola, the Minister of Power, Works and Housing, said that Nigeria “had secured the necessary certification from the International Atomic Energy Agency (IAEA).” As such, the country is ready to start the production of nuclear energy. Fashola also noted that Nigeria already has 25 IAEA-certified graduates for civil nuclear, has found IAEA-approved construction sites, and has “started the design for the financing.” He hopes that adding nuclear energy would diversify the Nigerian energy industry, help contribute to reducing carbon emissions, and make energy prices lower. [Read more](#)

Russia proposes building civil nuclear in ASEAN countries

20 May 2016

Russian President Vladimir Putin lobbied for Rosatom, saying that it was time for Southeast Asian countries to go nuclear. So far, none of the ASEAN member countries have any nuclear power plants, and no nuclear reactor sites being built yet in the region. To this day, no reactor deals were signed between Rosatom and an ASEAN country. Moreover, every ASEAN country has a different take on civil nuclear. Malaysia, for example, said that it still “needs to increase public awareness of the risks and benefits of nuclear reactors.” Indonesia, on the other hand, stated that it had \$8 billion for “four nuclear power plant of six gigawatts total.” [Read more](#)



Household items used to clean-up nuclear waste in Scottish nuclear power station

21 May 2016



During the decommissioning of Scotland’s Dounreay nuclear power plant, household items such as Blu-tack, poles, ironing board covers and duvets were used to clean-up nuclear waste. The solution helped scientists save time to come up with a more time-consuming, costly design for a special tool to do the task. This shows that efforts must be made to improve the ways how nuclear waste can be dealt with, as well as to make such methods less costly, if people plan to continue opening power plants. [Read more](#)

Thai government approves nuclear energy bill

22 May 2016

The “Nuclear Energy for Peace Bill” has passed the Thai National Legislative Assembly. It is seen as a bill that helps introduce nuclear power to the country. It was intended “to be a regulation for controlling firms that use the radioactive material.” While the bill was given a nod by the government, it nevertheless received both support and opposition from academics and the public sector. Its supporters argue that it would bring safety from radiation. The critics, on the other hand, say that the bill “might not properly regulate radioactive material and nuclear waste transportation.” In addition, some argue that Thailand is not yet ready to have a nuclear power plant. But supporters reply that nuclear energy would ensure energy stability of the country. [Read more](#)



Japanese and American nuclear companies to build nuclear power station in North Wales

22 May 2016



A £14 billion nuclear power plant (called “Wylfa Newydd”) is to be built by Menter Newydd, a joint venture between U.S.-based Bechtel Management Company and Japan-based JCG Corporation. Horizon Nuclear Power will oversee its construction. Wylfa will be using four advanced boiling water reactors developed by Hitachi Nuclear Energy. This project is the result of a growing trend on clean energy and an increasing need to replace the current energy infrastructure. [Read more](#)

U.S. and Vietnam to collaborate on nuclear energy

24 May 2016

The U.S. and Vietnam have considered establishing a joint committee “to promote the use of nuclear power to achieve clean energy goals.” This followed a Sunday statement highlighting American support for Vietnam’s projects to tackle climate change. The statement had also pointed-out both countries’ intention to ratify the Paris agreement. [Read more](#)



EDF CEO refuses to set dates for Hinkley decision

24 May 2016



A major concern on the construction of the Hinkley Point nuclear power station is its long-standing delays. Vincent de Rivaz, the CEO of EDF's UK division, told the energy select committee that the firm was doing as much as it could to hasten its construction. However, he refused to show a precise timetable. There are a number of factors affecting the timetable of the project. One issue was that some unions called

for a two or three-year delay as EDF could simply not afford the huge costs of the project. [Read more](#)