

# NDA Monthly Update

#### March 2019

#### **Summary**

- Windscale chimney demolition under way
- Robots tackle radioactive hotspots
- Supporting technology development for Fukushima clean-up
- Search begins to find GDF site
- Winfrith land transfer saves £1.7 million
- Scotland's oldest reactor set for demolition
- Sellafield's triple tonne triumph
- Apprenticeship boost for small businesses

# **Diary Dates:**

21 March: Nuclear Skills Awards

**26 March:** Department for International Trade Civil Nuclear Showcase 2019

**March:** NDA Business Plan published

**9 April:** SSG Chairs and Vicechairs seminar, London

**23 June:** International Women in Engineering Day

**9-10 July:** NDA Stakeholder Summit. Anglesey

#### **Demolition starts on Windscale chimney**

The first blocks of concrete have been removed from the top of one of the world's most recognisable chimneys. This marks the start of the demolition of Sellafield's Windscale Pile One stack. The 125-metre tower – the scene of Britain's worst nuclear accident in 1957 – will now start to disappear. Workers are cutting out six-tonne 'chunks' of concrete using diamond wire saws. The blocks are then removed with the help of a 152-metre crane, the tallest structure ever built at Sellafield, just a few metres shorter than the Blackpool Tower.

Weblink: Windscale chimney demolition

## Robots tackle Sellafield's notorious radioactive hotspots

Robots have started to remove radioactive sludge from the most hazardous spot at Sellafield, a sub-section of the First Generation Magnox Storage Pond known to site staff as 'D-Bay'. The area was used to deposit sludge which started to accumulate during the 1970s and is now being 'hoovered up' using robotic arms, following 10 years of planning with supply chain partners ACKtiv joint venture and Jacobs. D-bay holds the equivalent of 35 concrete mixer trucks of sludge, and has been a no-go area for around 40 years, due to the proximity of sludge to the surface and sheer volume of radioactive material.

Weblink: Sludge removal under way



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## Supporting technology development for Fukushima clean-up

NDA Head of Technology Melanie Brownridge is part of an international panel working with the Japanese to review their research for technologies needed to clean up Fukushima. On a recent visit, she was impressed by progress since 2016, with structures built over the reactor buildings so debris and fuel can be retrieved and an ice wall barrier in place to minimise the potential contamination of water that flows naturally across the site. Meanwhile, requirements to wear protective clothing are now minimal for visitors to the site, demonstrating the overall 95% reduction in dose. Japan set up its International Research Institute for Decommissioning (IRID) in 2013, two years after the tsunami, and seeks international advice on technology development through the International Advisory Panel (IAP).

Weblink: Fukushima progress on the ground

#### Search begins to find site for Geological Disposal Facility

NDA subsidiary Radioactive Waste Management (RWM) has now started the search for a volunteer community to host a future Geological Disposal Facility (GDF). The start of the process follows the publication of the government's statement on how it plans to work with interested communities. Geological disposal is one of the UK's largest-ever environmental protection projects, which will provide a safe and secure long-term disposal solution for higher activity radioactive waste. The Welsh government, meanwhile, has also published its policy, supporting geological disposal for the management of higher activity radioactive waste.

Weblink: Site search begins for geological disposal facility and Welsh policy

## Winfrith land transfer secures £1.7 million savings

The NDA has secured savings of almost £1.7 million through the sale of land at Winfrith to a waste processing specialist. Tradebe Inutec, an existing tenant, has operated a facility at the Dorset site for more than 30 years and now has greater flexibility to expand or diversify its operations on land adjacent to the former civil nuclear research site - which is now being decommissioned by Magnox Ltd. The agreement will safeguard up to 70 skilled jobs.

Weblink: Land transferred to waste specialist

## Scotland's oldest reactor ready for demolition

The decommissioning of Dounreay's oldest nuclear reactor took a major step forward with the award of a multi-million pound contract. Dounreay Materials Test Reactor (DMTR) was the first operational nuclear reactor in Scotland and achieved criticality in 1958. It was built to test the effects of radiation on different materials and operated for 11 years. Demolition of the reactor building will be a major skyline change for Dounreay, signifying another major hazard reduction milestone at one of the NDA's sites.

Weblink: Reactor ready for demolition



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#### **Triple tonne triumph**

Sellafield's Pile Fuel Storage Pond has passed an important point in its clean-up journey with the removal of 300 tonnes of solid waste from the legacy pond. When retrieval operations in the Pile Fuel Storage Pond began in 2012, there was an estimated 750 tonnes of bulky waste items to remove, including redundant equipment and discarded skips. The 300 tonne mark was achieved in November with the removal of the 89th skip. There are now 97 skips remaining, which along with the other bulky waste should be fully removed and in safe interim storage by 2024.

Weblink: 300 tonnes removed from Pile Fuel Storage Pond

#### Apprenticeship boost for small businesses

Sellafield Ltd is funding 50 new apprenticeships for small companies in Cumbria, with training scheduled to start by February and more apprenticeships set to be available throughout the year. The scheme will help boost employment opportunities for local people, address specific skills shortages and help drive growth in the region. Training will cover a range of professions from customer services, property maintenance and scaffolding, to logistics and horticulture. A range of small companies will be identified as host employers and will be matched to apprentices as they are recruited. The training is funded by Sellafield Ltd on behalf of NDA and includes the wage costs for the first year of each apprenticeship.

Weblink: Scheme for community apprenticeships

# Graduate scheme celebrates 10<sup>th</sup> anniversary

The NDA has celebrated 10 years of its *nucleargraduates* scheme. The milestone was marked at a celebratory dinner where NDA Chief Executive David Peattie pledged a renewed boost to the scheme over the next 10 years in a bid to help future proof and diversify the UK's nuclear workforce. It will see the NDA invest around £15 million in total skills over the next 10 years. To date, 344 graduates have completed the programme.

Weblink: Graduate training scheme celebrates 10<sup>th</sup> anniversary

## Bradwell achieves a first for the UK nuclear industry

In a first for the UK nuclear industry, Bradwell Site, in Essex, has reached the passive stage of its journey to full site clearance, an 80-year phase known as 'care and maintenance' (C&M). An extensive programme of decommissioning has been under way since the power station stopped generating electricity in 2002. For C&M, all that will remain on the site are the two weather-proofed reactor buildings, the ponds complex, and the intermediate level waste store, which will continue to receive some packages from Dungeness A and Sizewell A.

Weblink: Care and Maintenance milestone



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## **New Chair confirmed for Magnox Ltd**

David Peattie, NDA Chief Executive has announced that Lawrie Haynes has been appointed Chair Designate of the NDA subsidiary Magnox Ltd. The new subsidiary will come into being on 1 September 2019 when the current Parent Body Organisation, the Cavendish Fluor Partnership, hands over to the NDA. Lawrie has extensive experience in senior executive and non-executive roles across a range of major private sector companies and high profile public sector organisations, with a strong track record in the nuclear sector. These include his roles as President of Rolls-Royce Land and Sea Division, Chief Executive of British Nuclear Group and Non-Executive Director at Network Rail.

Weblink: Experienced nuclear leader for Magnox role

#### Archive named best building in Scotland

The NDA archive Nucleus (The Nuclear and Caithness Archives) has collected another prestigious award after being named best building in Scotland by one of the industry's professional bodies. he Royal Incorporation of Architects in Scotland (RIAS) selected the £20 million facility, near Wick, for the 2018 Andrew Doolan Award from a shortlist of 12. Earlier this year, it was among 49 Royal Institute of British Architects (RIBA) winners, selected from more than 600 UK entries, and one of 12 Scottish RIAS winners.

Weblink: Nucleus shines at award 2018

## **Supply Chain Event success**

A record 1,700 visitors enjoyed a day of exhibitions and informal networking at the Nuclear Decommissioning Authority (NDA) Estate Supply Chain Event. The annual event, now one of the largest of its kind in the world, is held at Manchester's EventCity, and attracts businesses from across the UK and overseas. Launched 8 years ago by the NDA and its businesses, the aim is to create greater visibility of opportunities for suppliers, and in particular for Small and Medium-sized Enterprises (SMEs), who represent around half of the visitor numbers.

Weblink: Record visitors at event

#### Wylfa defueling amost there

Three-quarters of the used nuclear fuel has now been now emptied from Wylfa's twin reactors and transported to Sellafield for reprocessing. At the start of defuelling, the reactors contained almost 90,000 fuel elements and 33,800 are now left. Once the reactors are empty, and all the fuel elements have been dispatched to Sellafield, over 99 per cent of the site's radiological hazard will have been removed.

Weblink: Wylfa reactors 75% defuelled