



Welcome to the final issue of this brief for 2020, which I hope finds you safe and well in these times of continuing challenge. With the relevant Covid-secure measures in place, we are doing what we can to continue to deliver progress and hazard reduction on sites. A large amount of work has been, and continues to be, completed.

People who can work from home are continuing to do so, using a range of platforms to ensure on-going communication and pastoral care. Our key focus as ever is safety and, in line with government guidance, we are taking all necessary measures to keep our workplaces and our workforce safe. We have continued to develop our Covid working arrangements and have discussed these with our contractors. Safety updates are regularly broadcast with timely reminders of the two metre social distancing rule, the importance of hand hygiene and site specific requirements.

We recently celebrated the first anniversary of becoming a subsidiary of the NDA and what an eventful year it has been. Some of our most recent progress is detailed below. I hope you find it an interesting read.

I'm sure next year will again bring its challenges, but we've shown that we can continue to drive our programmes forward in a safe and compliant way. Please take care of yourselves and your families as we enter the winter period – one which feels very different to previous years.

All the best, Gwen. **Gwen Parry-Jones, Chief Executive**

Site Progress

Detailed below are some highlights of ongoing and completed work at our sites. It is fantastic progress for us to be able to say that despite the Covid 19 pandemic - the changes that have had to be made on our sites and the health and safety associated processes that have been implemented - we are still able to work safely and confidently to deliver our mission.

Berkeley

After extensive planning and six years of focused work, including design, manufacture, factory testing and installation, the Berkeley sludge can reprocessing project has entered the inactive commissioning stage.

The Magnox team has taken over the plant from our appointed contractor following the successful demonstration of system performance when the final two dummy sludge cans were processed through the plant.

This is a big achievement for Berkeley and the culmination of a lot of hard work over many years. Inactive commissioning will take place in parallel to continuing work by our contractor who will work on the



sludge transfer system – the plant which will transfer the processed sludge into a ductile cast iron container for long-term storage.

Bradwell

Sizewell recently conducted its annual mobilisation programme at Bradwell. This included staff from Sizewell A and Magnox contract partners.

The three-week schedule of works delivered the annual inspection and maintenance programme at the site, which has been in care and maintenance since November 2018.

In addition to a range of works undertaken, including: external civil inspections of buildings and structures, security inspections and maintenance, and Interim Storage Facility (ISF) crane maintenance; the site installed a generator connection point and conducted a five-yearly electrical outage routine.



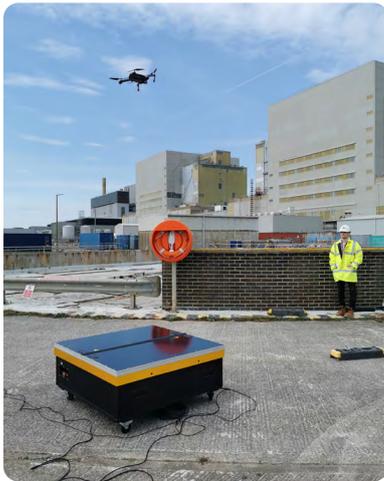
This year saw a slightly reduced scope of works from 2019 as the internal inspections of the safestore voids will next be completed in September 2021.

Chapelcross

Chapelcross is set to achieve a major milestone with the first package of Intermediate Level Waste (ILW) being placed in the ISF.

The facility is designed to store packaged ILW in line with Scottish Government Policy. This facility will allow storage and management of waste packages in a controlled environment for up to 120 years. It can handle and store approximately 700 packages of various types using an automatic overhead crane to place and retrieve packages.

Final tests, checks and approvals are underway and the first package is expected to enter into the ISF within the next few months.



Dungeness A

Dungeness A is trialling a new system that enables automatic drone deployment, recovery and recharging without the need for an operator to be in the vicinity. The drone will effectively follow pre-programmed instructions and return to its home box, sitting there quietly until the next planned flight.

The benefits of unmanned aerial vehicles (UAVs), to use the correct technical name, are wide-ranging; fewer working-at-height hazards for people, reduced requirement for scaffolding or expensive access platforms, provision of detailed photographic data, savings in time and cost.

Developed by Bedford-based start-up HeroTech 8, the month-long trials are part of the NDA's group-wide 'Grand Challenges' approach to technical innovation. This seeks to solve decommissioning by placing greater emphasis on autonomous and digital technologies to remove humans from harm and improve mission delivery. The learning is being shared with Sellafield and the Civil Nuclear Constabulary.

Harwell

After two years of decommissioning work the removal and insitu cleaning of Harwell's off-site discharge pipeline, which covered a distance of more than 8.5 kilometres, has been completed. The 1,650 individual pipe lengths, each weighing 1,150kg, were removed; resulting in approximately 1,900 tons of cast iron pipework waste. This will be sent to a facility for decontamination and recycling.

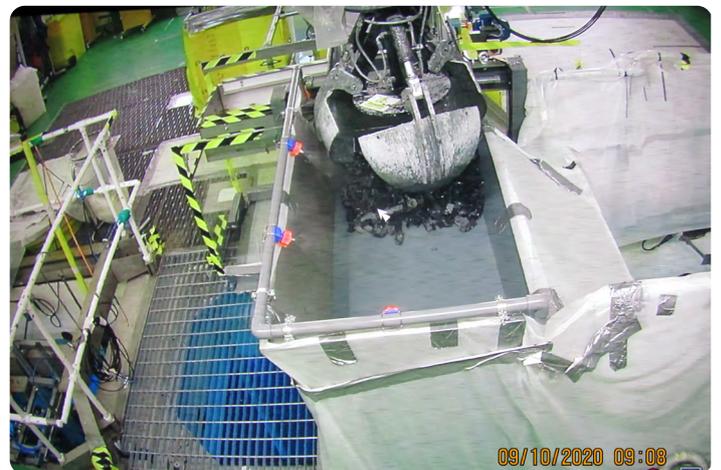
The project was completed without any significant safety events. The work incorporated a high level of industrial risk (excavations, heavy lifting, and confined space entry) and over the duration of the works there were many challenges. These were overcome by close working between Magnox and its contractor, Priory. We maintained significant engagement with stakeholders during the project. The next phase of work involves developing the case to remove the pipeline route from the Environmental Permitting arrangements.

Hinkley Point A

Fuel element debris (FED) retrievals at Hinkley have restarted following the operational pause and, as the critical path activity for the site, mark a significant step towards returning ILW retrievals, and the Hinkley site, to normal operations.

The first retrieval follows some significant effort to return the vaults to service, including the re-rope of two cranes which had to be completed before retrievals restarted.

Peter Montague, site director, said: "Having achieved good retrieval rates just before the pause it was frustrating for all of us to stop, and it has been a long road back. The crane rope issue came unexpectedly to give us another obstacle to overcome and this was resolved very quickly from a standing start. Despite that set back, the team is on the vault 10 days earlier than our forecast. The site now needs to ensure we can keep everything



running to achieve our baseline target of 80 drums of FED (9.68 tonnes) safely and compliantly retrieved by the end of March."

Hunterston A

Higher Activity Waste (HAW) processing operations at Hunterston A were successfully resumed last month after the Covid-19 pause. All maintenance activities were successfully completed and good progress is now being made on waste processing operations.

The SAWBR facility (Solid Active Waste Bunker Retrieval) was constructed to recover solid HAW from within the site's five HAW bunkers. This is achieved by using remotely operated vehicles to fill hoppers that are then tipped into RWM (Radioactive Waste Management Ltd) approved 3m³ stainless steel boxes.

Due to the restart of HAW operations, progress to recover the wastes from Bunker 1 now stands at 48 boxes. This brings the total package count to 940 against a forecast total of 1,110 boxes by summer 2022, factoring in the delay due to the pause. Final tests, checks and approvals are underway and the first package is expected to enter into the ISF within the next few months.



Maentwrog

The annual four-week operational outage was postponed from June to August this year due Covid-19 work restrictions. The inspection and maintenance work focused on the two concrete tunnels and three pipelines, built in 1828, that are items of the power station's operating system and are normally submerged in water during operational periods. Planned care and maintenance is required to retain these items in service until at least 2084 when the site is currently scheduled to be decommissioned.

Mona Lifting, Anglesey, carried out repairs on the low pressure pipeline by welding curved plates on the internal surface of the pipeline to strengthen areas where studies have identified potential areas of weakness.

Two half-kilometre long, nine feet diameter tunnels were mined through two hillsides in the 1920s. When their basic shape was created, wooden form work and shuttering was built to line the tunnels with a concrete cast.

This year's outage inspections discovered voids between the lining and the mined rock, which were subsequently grouted and filled. Two-thirds of the repair work was provided by the local supply chain. Scaffold access was provided by Altrad Services from Wylfa site.

Site staff increased their efforts to return the generating plant early, and both Unit 1 and Unit 2 were returned to service early September.

Oldbury

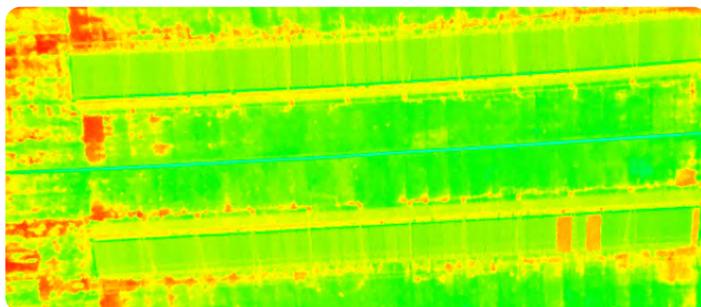
A 130-tonne crane arrived at Oldbury in the last week of September as part of the cooling water culvert sealing project. The crane was used to lift the cover off the entry point to the culverts, near the sewage plant.

The operations team has now installed pumps to drain the flooded culvert and allow access to install steel shutters. The project will permanently seal the culverts from water ingress from the river, eliminating the risk of flooding in the turbine hall and reactor basements.

Sizewell A

The Sellafield UAV Team recently supported Sizewell A in undertaking thermal imaging surveys of the reactor and welfare building roofs.

This sensor technology provided Magnox with a precise inspection of the condition of the roofs which will support future maintenance. Sellafield provided the equipment and drone pilot to support our understanding of the potential use of drones for thermal imaging.





Trawsfynydd

A 130-tonne crane lifted Trawsfynydd's Camsey tank into an ISO container with a bespoke reinforced floor, to enable safe transportation to Studsvik's metallic low-level waste smelting facility in Sweden last month.

The lead-lined tank weighed in at 17 tonnes and had previously been used for ponds sludge processing during the site's generation phase. The tank was named after a former director of National Power, Granville Camsey, a name which has stuck for more than two decades.

The tank had been stored inside an ISO container for more than 20 years after deplanting from the former cooling ponds complex in the late 1990s. The tank has been a challenge for the site over the years; however the team's determination and close collaboration with LLWR, Radiation Protection and the Plant & Structures teams facilitated its disposal for metallic treatment. This represents another step in the right direction for reducing the burden of legacy radioactive waste on site.

Winfrith

Work has started at Winfrith to construct a reinforced concrete slab which will eventually be used to house the new grout and concrete plant at the steam generating heavy water reactor.

The finished plant will supply concrete and grout to encapsulate the waste from the reactor dismantlement.

The work is being carried out by Gelder, a sub-contractor to James Fisher Nuclear.



Wylfa

In August, presenter, author and extreme fisherman, Will Millard, visited Wylfa to record an episode for the second series of the popular Hidden Wales TV series.

It features some of Wales's biggest engineering projects and delves behind the scenes at Wylfa with Medwyn Williams, Wylfa integration manager, whose Magnox career spans more than 40 years. Will Millard was in awe; seeing defuelling in action above the pilecap and being able to get up-close to the reactor's concrete vessel.

The programme is available to view on BBC iPlayer. <https://www.bbc.co.uk/programmes/m000n9tq>

Supply chain engagement supports new strategy development

Magnox has ramped up its engagement with the supply chain to enable us to shape our business planning to create site specific decommissioning strategies. In our last update, we shared with you the plans to change our strategy from a uniform period of care and maintenance for all sites to a more bespoke programme of decommissioning. One element of this is the intent to bring forward reactor decommissioning at our lead site, Trawsfynydd.

To help us engage with the supply chain during this journey we've produced a new brochure called 'Magnox and our supply chain: working together for a better future'. The brochure aims to give suppliers an overview of our commercial strategy, information about our spend and helpful points of contact.

We also held a webinar last week for 500 delegates from 300 companies. Titled 'Help us shape the future of decommissioning', it is the first step in engaging with the supply chain to allow us to underpin our business cases, as we plan and prepare for the successful delivery of our new strategy.

The presenters from across our business were: Andrew Forrest, technical director; Linda Sapsford, head of procurement and supply chain; John Norton, head



of technical strategy; and Sohail Ashraf, programme manager - continuous reactor decommissioning.

You can view their slides by clicking [here](#).

Over the next few months, Magnox will be holding separate panel discussions with a cross-section of companies to help shape our business plans. We will keep you informed of our progress.

Socio Economic Round Up

The Magnox Socio-Economic Scheme continues to help a number of local education settings, charities and disadvantaged groups. The 'good neighbour' scheme allows applications of up to £1,000 for smaller grants.

A pre-school near Harwell has received a grant to help equip its new outside, forest classroom. Little Pippins pre-school fundraised for two years for money to build the outside classroom and, once complete, funding from Magnox helped to provide the finishing touches.

Although the project was delayed because of Covid-19, the space is even more beneficial now due to the safe distancing measures that have been introduced.

Sam Abbott, manager at Little Pippins, said: "Thank you Magnox for helping us get up and running. The outside classroom has extended our 'learning through the environment' and 'awe and wonder of the world' ethos."

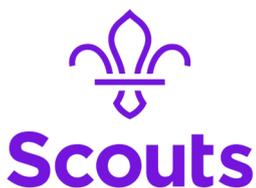
"A lot of our families have limited outside space due to their housing circumstances, and many of the children who come to Little Pippins haven't been able to explore their world around them in a safe and exciting way."



1st Lydd Scouts, based near Dungeness, are preparing to welcome back their young people after a long break due to the pandemic.

To do this in a safe manner some changes have been made, including replacing equipment that cannot be easily cleaned and adding to their equipment so young people can have a great Scouting experience whilst keeping safe.

The Magnox Socio-economic Scheme granted £970 to purchase some foldaway plastic-top tables, two mobile camping toilets and a couple of outdoor gas burning cooker tops.



Bloodhound Education Ltd, initially linked to the Bloodhound Project in 2008, is about to receive £9,000 of Magnox Socio-economic Scheme funding for a new venture at Berkeley SGS College.



The project aims to create a dedicated STEM outreach base to run practical science and engineering enrichment activities for the Gloucester and surrounding area schools.

There will be opportunities to widen participation outside of school hours including weekends and holidays. It will provide access to families, groups including Brownies, Cadets and Scouts, home-schooled students, and special education needs and disadvantaged groups who might not have the opportunity through school.