Magnox

SITE DIRECTOR'S REPORT
DUNGENESS A SITE

January 2012 – April 2012

As we head into the new financial year I look back with pride at what my team and all staff have achieved in the last 12 months. We have defuelled both our reactors and despatched all spent fuel to Sellafield for processing allowing us to make yet another transition this time into a decommissioning site; all achieved without significant nuclear, industrial or environmental events. Following counselling of all staff we had five members of staff appeal but now these individual cases have been resolved with redeployment and voluntary severance. Training has also been undertaken for those entering new roles and a number will be preparing to move from a shift operations role to new posts within departments such as Projects and Engineering. I'm sure their knowledge and experience of the site will be an asset as we progress with decommissioning.

Our aim in the coming months is to continue our decommissioning and de-planting work in parallel with demolishing redundant buildings. I'm very pleased with the work carried out to demolish the old admin building where we managed to use the crushed bricks and concrete as infill for our cooling water pump-houses which saved over 1,600 lorry loads of waste being despatched to landfill. We hope to emulate this as we move towards Interim Care & Maintenance in 2018.

Following formal fuel free verification from the ONR the site hopes to introduce further decommissioning work into the plan over the next few months. This work if authorised will focus on clearing the south side of the site. A number of buildings were demolished in the 2011/12 financial year including the old administration building, this work was introduced into the station plan part way through the year when additional funding was made available to the site. Other primary project work carried out in 2011/12 included the retrieval of sludge, asset care, work on the electrical overlay project, and a number of enablers to facilitate the move towards decommissioning including the provision of a laydown area for the sorting of waste.

2012/13 will see the completion of the work on retrieving of the sludge and the majority of the electrical overlay work. The overall portfolio of work at Dungeness is currently being considered along with other work within Magnox to work within the funding available to ensure best value to not only the company, but also the tax payer. Clearly this has to focus on significant hazard reduction, safety and compliance.

Dungeness A was awarded its 9th RoSPA Gold Award on 15 May through demonstrating, amongst other things, an excellent occupational health and safety management systems culture.

I am acutely aware of the changes to ways of working at Dungeness and our new roles of decommissioning and the increased risks to those carrying out this work. We will be refocusing on working safely by building on experience and embedding the application of Human Performance Tools to reduce human error and making Dungeness A a safe place to work.

Yours sincerely

Ray Jepps
Site Director

1. SAFETY AND THE ENVIRONMENT

SAFETY

As of the end of April 2012 there has not been a Lost Time Accident at Dungeness A for over 400 days. There were four First Aid related events reported during this period which is disappointing but also reflects the increased amount of physical activities on site. It also reminds us that we must continue to have a proactive approach to safety and not become complacent. We also have to ensure that we apply the learning from the investigation and trending of these incidents to prevent further events requiring First Aid from occurring.

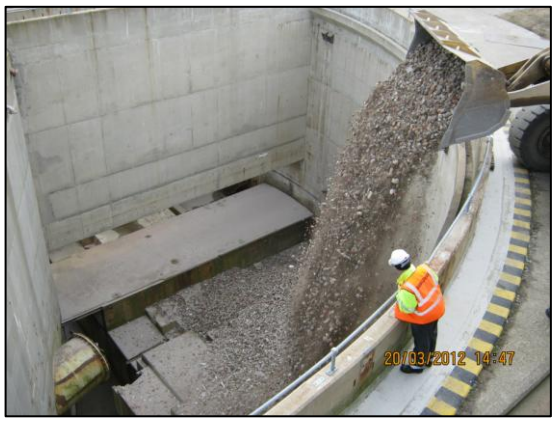
The completion of our demolition projects during this period is a credit to our contractors and the site teams who ensured that the work was delivered safely and compliantly. These relationships will develop further as our decommissioning activities increase over the coming years.

- The 3P plan which focuses on improving People, Plant and Process safety at Dungeness A has been successfully delivered. Work is underway developing on these improvements for the 2012/2013 3P Plan incorporating Human Performance Toolkit which aims to reduce the frequency of events by anticipating, monitoring, responding and learning from human failures. It also looks at reducing the severity of events that occur by verifying on an on-going basis that appropriate controls, barriers and safeguards are in place.

ENVIRONMENT

Dungeness works towards achieving a set of environmental objectives which include:

- To maintain an effective environmental management system and maintain certification to ISO 14001
- To comply with all environmental legislation, authorisations and permits and review new and updated legislation
- To ensure that all work is done in compliance with Environmental Impact Assessment Decommissioning Regulations (EIADR) by ensuring that any proposed changes to the decommissioning project are assessed for their potential environmental impacts.
- To conserve the use of natural resources and carefully monitor their use including a water reduction and energy efficiency plan which include improvement actions
- To reduce the percentage of waste going to landfill and promote the use of reduce, reuse, recycle. An example of this was when inert material from the demolition of the old admin. building and excavations to install a concrete hard standing area, was used to infill the Cooling Water Pumphouse. This eliminated the need to transport 3776m^3 of rubble and shingle along the roads of Kent which would have equated to 1640 lorry movements.



Concrete rubble and shingle from site used as infill for the CW pumphouse

- To maintain and promote bio-diversity on site through consultation with Natural England on all potential disturbance to SSSI areas and work with other partners (including EDF) in the Sussex Emerald Moth Partnership project.
- Minimise authorised discharges and prevent unauthorised discharges to the environment

2. DEFUELLING

Over the last few months at Dungeness we have taken huge strides forward in our defuelling performance as several key milestones were met and targets exceeded, namely:

1. Both Reactor One and Two cores fully defuelled in January and March 2012 respectively
2. Both ponds empty of fuel and the last Road Transport Flask despatched from site to Sellafield on the 17th of April 2012
3. All Fuel Free Verification work which systematically checked all fuel route areas for new, irradiated or significant fuel fragments was completed at the end of April 2012
4. A letter of principal was formally submitted to the ONR followed by a final letter in the middle of May after on-site inspections and audits of the verification process
5. A phased (voluntary) release of staff over the past few months well within Emergency Scheme constraints

The successful removal of all Magnox fuel on-site marked the conclusion of a highly challenging five year programme. A few key statistics are as follows:

- Approximately 55000 fuel elements removed from the reactors since the cessation of generation on 31st December 2006.
- 332 RTFs, equivalent to 610 tonnes of fuel despatched to Sellafield

Dungeness is now working with the ONR in regard to the acceptance of the post defuelling Management of Change (MOC) which is anticipated in Mid June 2012. This will enable the site to make the transition from a defuelling organisation to decommissioning.

In the next few months the site intends to take on the learning from previously defuelled sites such as Bradwell and Hinkley Point to place the fuel route in a satisfactory position prior to future decommissioning.

Last flask being monitored at railhead

3. TRANSITION UPDATE

Transition to Fuel-free Status

Once the Office of Nuclear Regulations (ONR) has formally agreed fuel-free status, Dungeness will go through the transition to become a decommissioning only site.

Preparations for this transition have been taking place throughout the year. This includes a review of the safety case resulting in reduced maintenance work requirements under the Nuclear Maintenance Schedule as well as a simplification of the operational requirements for the site. New emergency arrangements will also be introduced with less reliance on shift operations personnel. As a result of these technical reviews the site will implement a new staff structure as it goes through the transition.

The new structure shows an increase in the decommissioning projects organisation and a significant decrease in operations and maintenance staffing. Staff have been part of a comprehensive counselling process and significant union consultation during this time. In the new structure some staff will take up different posts with a number re-skilling into project engineering and management roles and a small number of staff have also taken up positions at Dungeness B. Between 40 to 50 staff will leave the company on selected voluntary severance.

The transition to the new fuel-free arrangements is now expected to take place at the end of June 2012.

4. SITE NEWS AND PROJECTS

Magnox Dissolution – FED Transfer

Following consultation with the SSG Steering Committee and recent letter sent to the SSG, you will be aware that Magnox is preparing to transfer FED from Bradwell to Dungeness for processing. There was a possibility that this may well have taken place before the SSG meeting but this has not been the case.

It is expected that the transfer will take place in June providing all necessary consents have been received.

As has been previously stated, the reason for doing this work is that Bradwell is one of two sites in the Magnox fleet that is working towards accelerated decommissioning and this will help it achieve its accelerated programme timescale by starting to process the waste ahead of the current planned date and commissioning of its new plant. This also supports the Nuclear

Decommissioning Authority's strategy of maximising the use of existing assets and it also maintains continuity of employment for some of our staff.

This proposal was put to the SSG Steering Committee on 6 March 2012 and consensus was that there was no real change in timescales to the proposal other than the originating site was different. This proposal will also ensure that our experienced operators retain their skills and the plant remains operational.

Intermediate Level Waste and Sludge Projects

Sludge

The project to dispose of low level active sludge, accumulated over the operating lifetime of the station, is progressing well and nearing completion. Two of the three storage tanks have been emptied, the sludge mixed with cement and packaged in containers. Four containers have already been transported to the Low Level Waste disposal facility at Drigg, Cumbria. The last tank of sludge will be emptied and processed throughout May and sent to Drigg in early June.

Intermediate Level Waste (ILW)

The conceptual design is progressing for the Intermediate Storage Facility (ISF) in which the ILW MiniStores will be stored on site until the national ILW Disposal Facility becomes available.

Work is also progressing for the preparations for retrieval and safe packaging of various ILW waste streams e.g. IONSIV Cartridges and filters, Desiccant and Catalyst, and Miscellaneous Contaminated Items (MCI). The retrieval activities will not be taking place until the Interim Storage Facility is available which is expected to be in April 2014.

Electrical overlay scheme (EOS) Site reconfiguration

The EOS site reconfiguration works include extension and connection of the 6.6kV power supplies into key transformers around the site. The existing standby support and distribution system will be modified to use the new supplies and will meet the requirements of the safety case being prepared for the project. Works include:

- Extending the 6.6kV supply installed to key points around the site and reconfigure 415V supplies to key points around the site
- Supply and install alternative supplies to 3.3kV Essential Supplies and associated transformers.
- Supply 6.6kV to Reactor Service Building and the National Grid's 275kV building.
- AMCO were awarded the contract in July 2011 to complete the design of the works and provide, install and commission the new equipment. They have:
  - ✓ mobilised to site
  - ✓ developed the detail design along with their specialist subcontractor AECOM.
  - ✓ Installed cabling for the 'no break supplies and Reactor Services systems.
  - ✓ Supplied nearly £1m worth of new electrical equipment to Site.

- Work on Plant Item Operating Instructions (PIOIs) and Maintenance Instructions (MIs) are also being progressed in parallel.

Managed Retreat (Accelerations)

The NDA approved the business cases for an additional £2.4m of funding to support the acceleration of several decommissioning activities such as:

- Characterisation (the process for determining the chemical and radiological classification of materials and waste) - to date site sampling and analysis plans (SSAPs) and asbestos surveys have been produced to allow the buildings to be demolished as part of the accelerations.

- National Grid Road and Clearance & Recycling Centre apron improvements – This is a new section of road to enable access to the 275kV substation and a new hard standing area to enable more efficient management of waste. Both completed.
- Replace the existing contractors' compound and provide a new Occupational Health Facility - this will accommodate the increase in contractor numbers on site with the OH services being relocated due to planned demolition of current building. This work is now complete and both buildings are occupied.
- Demolish ancillary buildings – The Boron Dust Building, Safety Management buildings GS Buildings and the Flocculation tanks have all been demolished and waste removed from site.
- Demolish the Administration building, Administration Annex and Canteen – demolition now completed.
- Install new Gate Post Monitor – new monitor installed, and being prepared for use to ensure all items leaving site are checked and clear of radiation before being allowed to leave site.

Demolition of the old admin building

Systems & Structural Preservation Project (S2P2)

The Systems and Structural Preservation Project will examine those systems and buildings required for future site operations to determine the best practicable means of implementing a programme of replacement, refurbishment or accelerated decommissioning as appropriate. The projects are as follows:

- Turbine Hall Roof Glazing – The defective glass has been replaced by translucent glass reinforced plastic (GRP)
- Site Roof Repairs – A number of roofs on site have been repaired in defective areas or replaced.
- Low Level Active Waste (LLAW) Plant – Oil Collection Tanks Refurbishment – New valves have been installed on a number of oil storage tanks and the fire system refurbished along with the painting of the tanks.
- Turbine and Reactor Unit Transformers oil removal - transformer oil has been removed from eight redundant transformers and appropriately disposed of.
- Water Spray Fire System Replacement - the old water spray fire system valves located on the conventional side of the site have been replaced with new valves.
- Review of Electrical Boards - Over 690 of 900 electrical boards have been inspected and will now need to be tested as part of Electrical Regulation requirements. Work is due to be completed by 2014
- Towns Water Main Inspection/Survey – The site's towns water system was been surveyed and defects identified and repaired.
- Lighting – A number of defective street lights have been removed with some being replaced with latest standards of lights, others have been replaced with illuminated bollards.
- Boiler annexe cladding – new fixings have been installed to the translucent sheeting on 1B and 2B boiler annexes.

Proposed Work Packages for the forthcoming year

- Site Roof repairs – reactor drum house roofs
- Reactor building roof drains – improved the drainage on this building
- Tank Pipe work modifications in the Active Effluent Water Treatment Plant (AEWTP)

5. EMERGENCY PREPAREDNESS

Matter of Interest arising from the EPCC

- The EPCC met on 19/01/12. We briefed the EPCC on the forthcoming changes to the Emergency Plan when the site is declared to be fuel-free.

Emergency Plans and Handbook

- The site's proposed revised decommissioning Emergency Plan has been successfully reviewed by the Nuclear Safety Committee and is now with the ONR for formal approval. This approval is expected to be received on 14/06/12.
- The Handbook is being reviewed by the company in preparation for decommissioning.
- The site is continuing to train its Emergency Scheme personnel in preparation for implementation of the new arrangements.

Emergency Exercises - Dungeness A

- On 22 February the site conducted an Emergency Exercise which was witnessed by the ONR, using the proposed decommissioning arrangements. This exercise was also the partial re-demonstration from the Level 1 Exercise carried out last October. Both the site and the ONR were satisfied with both aspects of the exercise.

Next Planned Exercises -Dungeness A

- On Wednesday 22 August 2012 – the site will conduct its annual Level 1 Exercise.

Emergency Facilities

- The relocation of the site's Emergency Control Centre within the Central Control Room has now been shown to be a significant improvement to our emergency facilities.
- Plans are now being made to relocate the Access Control Point to the Central Change Block later this year.

7. STAFFING

As of 31 March 2012 there were 296.8 full time members of staff at Dungeness A. These figures appear low as there are an additional 18 of staff who have a central role but work from Dungeness A therefore the number currently working at Dungeness is 314.8. There are also 27 agency supplied workers, 4 contract supplied workers and 16 individuals employed through Framework Agreements. The number of contractors fluctuates according to the works being undertaken.

17 members of staff have left the company through a combination of resignation, retirement and voluntary severance since January 2012.

In 2012 Dungeness will be taking on one Summer Placement student and up to two Industrial Placements.

8. COMMUNITY RELATIONS

Socio-Economic funding

Funds are available to support and encourage socio-economic ventures in the area. Applications can be made on-line on www.magnoxsocioeconomic.com

9. COMPANY NEWS

Magnox and RSRL Competition

The Nuclear Decommissioning Authority (NDA) published a prior information notice in late April, stating that it intends to launch the competition for the management of Magnox Limited and the former research sites at Harwell and Winfrith, operated by Research Site Restorations Limited (RSRL).

Magnox will be required to provide all interested bidders with access to its sites and information. This process is still being developed and will be co-ordinated centrally. However, there will be a requirement for some site involvement, in particular to support the site visits phase,

The official competition process will begin when a contract notice is published later this year, followed by an industry day to further inform the market.