Magnox

Sizewell A Site

Nr Leiston
Suffolk IP16 4UE
Tel: +44 (0)1728 633300
Fax: +44 (0)1728 633520
www.magnoxsites.com

17 November 2011

To all members of the Sizewell A and B stakeholder group
Sizewell cracked flow-meter event: an update

In September I wrote to you about a leak from a flow-meter in Sizewell A's active effluent treatment plant (AETP). This facility is extremely important for defuelling and I am pleased to be able to report the facility is now fully reinstated and back in service.

The site's investigation of the event has also been completed so I am able to share its findings with you. Whilst we found that all the systems and processes worked as they were designed to do and that the effect of this event was negligible, we recognise that such events can erode the confidence of our stakeholders and we have worked hard to extract the learning from it.

During the flow-meter's life some gauze was fitted to its exit port to monitor the build-up of material in the treatment circuit. The fitting of the gauze has been identified as the root cause of September's event.

A maintenance activity, established to ensure collected particulate was cleaned out and analysed, combined with the relative fragility of the failed part's glass construction, is what resulted in the crack which caused the subsequent loss of liquid. Leakage only occurred about 30 hours after the part had been reassembled and leak tested, probably due to stresses set-up within the glass sight-tube during reassembly.

The investigation showed this was not the first time a flow-meter of this type had been damaged in this way although these were very infrequent events and had always been picked-up prior to putting the plant in service. The site and company has responded in a number of ways, including:

1. A review of all similar flow-meters has been done across the company. Vulnerable glass components in critical systems will be required to be replaced within a defined timescale.

2. The site has replaced this and another flow-meter with more robust modern equivalents.

3. We are strengthening our learning processes to better pick-up related events on systems.

4. We have strengthened our plant monitoring process to enable us to detect leakage from systems as quickly as possible.

5. We have undertaken an initial review of the system prior to returning it to service and are undertaking a full review to identify areas where further investment is required to strengthen plant integrity.

My presentation at your December meeting will take you through this event in more detail.

Tim Watkins
Site Director

Sizewell A report to the Sizewell A and B Stakeholder Group

Prepared: 17 November 2011

Safety

The site has experienced two lost time accidents (LTA) since the last meeting:

1. In September an individual slipped on a small piece of plastic chain and twisted their back. The article is believed to have blown from scaffold during inclement weather;

2. In November, whilst working attached to an inertia block reel, a scaffolder twisted his back when the block locked during normal use.

There have been no operating rule or maintenance schedule breaches since the last meeting. Over 86 days have passed since the last lost time accident on site.

People

The workforce currently stands at:

- 358 Magnox staff
- 7 agency workers
- 121 contractors

Defuelling

The pond water treatment loop was taken out of service to make way for investigation and repair works following the failure of a flow-meter in September. Reactor defuelling was paused during this time. Careful monitoring of pond chemical parameters was undertaken while all spent fuel stored in the ponds was shipped to Sellafield. A total of 15 flasks were despatched. Defuelling resumed when the treatment system was returned to service.

The site has begun preparing for potential increased flask availability which could occur as completion of defuelling on one of the reactors at Dungeness A gets nearer.

Current defuelling status:

	% defuelled	Elements remaining
Reactor One	**28.12**	**19026**
Reactor Two	**25.99**	**19594**
	Elements	**Skips**
Ponds stocks	**28**	**1**
	Tonnes	**Flasks**
Despatched (total)	**172.13**	**86**
Despatched (YTD)	**36.69**	**18**

Optimising resource usage

Two operators have taken secondments to progress plans for establishing an operations 'day team'. This will look to strengthen the partnership between day and shift workers, speeding up the process of isolating plant, improving safety and preparing for future decommissioning.

Projects update

- *Control and instrumentation (C&I) overlay*

Project purpose: Provision of a sustainable control & instrumentation infrastructure for the site, ensuring compliance and business continuity through care and maintenance and beyond.

Rewiring of the IT and telecoms network is complete and the contract for a new wide area network (WAN) connection has been let to BT Openreach. Civil work on the new WAN will commence in December. Work on the public address, radio, fire and security systems is planned to start in 2012 and this will be followed by alarm and monitoring systems which begin in 2013.

- *Active effluent treatment plant – tank restoration*

Project purpose: To overhaul the ageing active effluent treatment plant – comprising tanks, pumps and filtration units – ensuring it remains operable and compliant for the essential role of maintaining pond water conditions during defuelling and ponds decommissioning.

Work has now begun on installing new strainers between the existing sand pressure filters and the final monitoring and delay tanks (FMDTs). This will help to maintain the newly refurbished condition of the FMDTs whilst also monitoring the performance of the sand pressure filters themselves. Since the last report, one further tank has been cleaned with all necessary repair work undertaken. The commissioning work on the active effluent pumps and decarbonating tower transfer pumps is complete.

- *Asbestos containing material (ACM) removal*

Project purpose: To efficiently remove hazards associated with the site's asbestos inventory – estimated by survey to total more than 4,700 cubic metres.

Removal of reactor building riser pipework is progressing well. The first set has been successfully removed and work on the second set is in progress. The turbine hall annexe pipework has been taken down and the team are currently removing access scaffold in order to remove the remaining obsolete steel support structures.

- *System and structures preservation*

Project purpose: To preserve degrading structures (buildings) and systems (plant) whose continued use are required for delivery of the site's decommissioning programme.

In the past three months, work to update the site's town main water supply to a pressure-fed system has been completed, leaving water systems compliant with the latest regulations. Added to this, completion of work to repair and weatherproof the turbine hall roof has resulted in significantly improved safety conditions.

- *Electrical overlay*

Project purpose: To provide Sizewell A with an alternative and fit-for-purpose electrical infrastructure to meet the needs of care and maintenance preparations.

An agreement has been reached with EDF to provide Sizewell A with an alternative 11kV supply. This is a crucial turning point in the project which itself is a key enabler to the site's decommissioning programme. This solution to arranging new supplies is beneficial because it avoids the cost and disruption of routing new cables through virgin land from Knodishall.

ENERGYSOLUTIONS

Sponsorship and Donations

We have been completely overwhelmed with requests for funding from great causes in the area. So much so, that this year's fund has been allocated in its entirety. Some of the causes that received funding this year include refurbishment of facilities at Leiston Guide Hut and Coldfair Green Primary School, Young People Taking Action, Sizewell and Leiston Kids Karate Club, and Christmas lights for Aldeburgh and Leiston.

The scheme re-opens in January 2012. Please contact us if you know of a good local cause we might consider (subject to available funding). Requests can be sent to Haleana Knights, by email to haleana.knights@magnoxsites.com or by post to Sizewell A Nuclear Site, Leiston, Suffolk, IP16 4UE.