



# Office for Nuclear Regulation (ONR) Quarterly Site Report for Wylfa Power Station

Report for period 1 January – 31 March 2016

## Foreword

This report is issued as part of ONR's commitment to make information about inspection and regulatory activities relating to the above site available to the public. Reports are distributed quarterly to members for the Wylfa Site Stakeholder Group and are also available on the ONR website (<http://www.onr.org.uk/lrc/>).

Site inspectors from ONR usually attend Wylfa Site Stakeholder Group meetings and will respond to any questions raised there. Any person wishing to inquire about matters covered by this report should contact ONR.

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## 1 INSPECTIONS

### 1.1 Dates of inspection

The ONR site inspector made inspections on the following dates during the quarter:

18, 19, 20, 21 January 2016

9, 10, 11, 12 February 2016

21, 22, 23, 24 March 2016

ONR Conventional Safety Inspectors undertook an inspection on 5 and 6 January 2016.

An ONR Fire Safety Inspector undertook an inspection on 11 and 12 February 2016.

ONR Electrical, Control and Instrumentation Specialist Inspectors undertook inspections on 30 and 31 March 2016.

## 2 ROUTINE MATTERS

### 2.1 Inspections

Inspections are undertaken as part of the process for monitoring compliance with:

- the conditions attached by ONR to the nuclear site licence granted under the Nuclear Installations Act 1965 (NIA65) (as amended);
- the Energy Act 2013;
- the Health and Safety at Work Act 1974 (HSWA74); and
- regulations made under HSWA74, for example the Ionising Radiations Regulations 1999 (IRR99) and the Management of Health and Safety at Work Regulations 1999 (MHSWR99).

The inspections entail monitoring licensee's actions on the site in relation to incidents, operations, maintenance, projects, modifications, safety case changes and any other matters that may affect safety. The licensee is required to make and implement adequate arrangements under the conditions attached to the licence in order to ensure legal compliance. Inspections seek to judge both the adequacy of these arrangements and their implementation.

In this period, routine inspections of (site/station) covered the following:

Examination, maintenance, inspection and testing;  
Management of operations including control and supervision;  
Staff training, qualifications and experience;  
Modifications to plant, equipment and safety cases;  
Emergency preparedness;  
Incidents on the site.

In general, ONR judged the arrangements made and implemented by the site in response to safety requirements to be adequate in the areas inspected. However, where improvements were considered necessary, the licensee made satisfactory commitments to address the issues, and the site inspector will monitor progress during future visits. Where necessary, ONR will take formal regulatory enforcement action to ensure that appropriate remedial measures are implemented to reasonably practicable timescales.

#### Safety System Inspections

ONR includes inspections of the systems that contribute to the safety of operating reactors in addition to compliance inspections based on the conditions attached to the nuclear site

licence. The nuclear site licence requires that all licensed sites must have a safety case in respect of any operation which may affect safety. For the Magnox reactor that remains in operation at Wylfa power station, 30 systems have been identified to provide the basis for inspecting safety systems to ensure they meet the claims made on them by the safety case. The intention is to inspect systematically over a five year cycle all of the safety related systems identified for the site. ONR considers that this approach will provide the necessary level of assurance that the requirements of the safety case are met and the site is being operated safely.

This quarter the safety system inspected was the Pile Cap Control and Instrumentation Systems. On the basis of the inspections, the systems were deemed to be operated and maintained in accordance with the requirements of the station safety case. Where areas for improvement were identified, station undertook to take appropriate action to address them. ONR will monitor progress to complete the agreed work.

Further details of ONR's system inspections at Wylfa power station and other nuclear licensed sites can be found at: <http://www.onr.org.uk/intervention-records/index.htm>

### Asbestos Management

A number of matters were identified during the site inspection undertaken by conventional safety inspectors on the 5th and 6th January 2016 in relation to the management of asbestos containing materials (ACM's). A letter was subsequently sent to site seeking proposals to address the following matters:

- Turbine Hall (Deaerator floor). The licensee needed to deal with three small areas of asbestos pipe lagging where encapsulation was seen to be degraded.
- External Pipe Bridge Reactor 2. Significant cracking was visible in two areas of redundant steam pipe cladding while water ingress had damaged a separate section of metal cladding exposing lagging material. These areas required further investigation to determine if any ACM was involved.
- The licensee is significantly behind plan in respect to the 12 month re-inspection of ACM locations.
- The licensee needs to review ACM information contained on its asbestos database to ensure that high risk ACM locations are being suitably managed.
- The licensee should ensure that asbestos register information is checked by key staff prior to any work starting on the fabric of the building. There should not be an over reliance on the Asbestos Competent Person function.

### Fire Safety Inspection

The inspection focused on the themes of fire safety management and practical fire safety provision. A small number of minor issues from previous fire safety inspections were reviewed and found to be either closed out or being managed adequately. The physical inspection concentrated on those areas of plant that involve the outage work being undertaken in preparation for defueling operations and in particular those areas of difficult access. The inspection identified a number of areas of industry good practice and although there were no issues of non-compliance some recommendations for a small number of areas for further development were provided.

### Electrical, Control and Instrumentation (C&I) Inspection

The scope of this intervention by ONR Electrical and C&I Specialist Inspectors covered the EC&I engineering activities that station are undertaking in preparation for the defueling phase of operations. This intervention focussed on the licensee's progress in implementing Licence Condition 24 arrangements in respect of the development of Referenced Station Operating Instructions (RSOI) in support of the PGDSC.

The majority of electrical modifications were found overall to be progressing adequately. However, the licensee has identified that some protection settings on the electrical distribution

system may not be optimised for the proposed emergency back-up generation arrangements in the defueling phase. The licensee is taking action to remediate this aspect, but in the meantime it has justifiably adopted a conservative approach by retaining the extant configuration of emergency back-up generation going into the defueling phase.

## 2.2 Other work

The site inspector attended the quarterly regulatory liaison meeting. The meeting focusses on reviewing areas of shared regulatory and operational interest with a view to ensuring common understanding and expectations across all organisations to provide successful outcomes. The meeting was attended by regulators from National Resources Wales, Environment Agency and ONR and management team members from Wylfa. There were no significant matters arising during the meeting. Site primary focus is now on completing required modifications to transition to defueling and managing transition to the revised organisational structure. The meeting provided a good opportunity to share matters of joint interest with the other regulators and ensure common understanding of individual organisational expectations.

## 3 NON-ROUTINE MATTERS

Licensees are required to have arrangements to respond to non-routine matters and events. ONR inspectors judge the adequacy of the licensee's response, including actions taken to implement any necessary improvements.

Matters and events of particular note during the period were:

### Removal of Incorrect Fuses from 3.3 kV Guaranteed Supplies Transformer Rectifier

A craftsman removed six fuses from the wrong electrical panel when undertaking routine maintenance against formal written instructions. The impact of the error was minor as it only resulted in alarm in the control room enabling the error to be rectified immediately. Magnox Ltd has undertaken an investigation and identified a number of opportunities to minimise repeating this event. ONR is assured that the investigation undertaken and recommendations are a sufficient response to this incident and should address the underlying causes.

### Auxiliary Gas System

During checks to confirm purity on the Auxiliary Gas system an individual got contaminated by a very small liquid spill to gloved hands and knees. Contamination also spread over a localised area including flow, walls and a cable tray. The incident was concluded by Magnox Ltd to be a result of working practices of the system engineer and chemist involved being inconsistent with more robust approaches adopted at lower levels in the organisation. Other causal factors were identified and actions have been identified to address all findings. An ONR Radiation Protection Specialist Inspector undertook a follow-up inspection during Magnox Ltd's investigation and confirmed that an adequate response was being taken by the licensee.

### Red Spot Fuse Board

Following an incident identifying an incorrectly rated fuse being installed, a selection of Red Spot Fuse boards were examined to determine if there were discrepancies between installed fuses versus designed ratings. A number of small power and lighting circuits were sampled with a high percentage found to have incorrect fuses installed. The majority of these were relatively small discrepancies. One fuse was identified that was rated significantly higher than designed which could have resulted in a potential fire risk in the event of an electrical fault. ONR Electrical Specialist Inspectors have undertaken inspections at Wylfa to seek confidence in the licensee's response to this incident. ONR has requested that Magnox Ltd ensure it follows its arrangements for plant modifications in responding to its investigation findings. ONR is also reviewing Magnox Ltd's finalised investigation report to seek confidence in its conclusions.

## 4 REGULATORY ACTIVITY

ONR may issue formal documents to ensure compliance with regulatory requirements. Under nuclear site licence conditions, ONR issues regulatory documents, which either permit an activity or require some form of action to be taken; these are usually collectively termed 'Licence Instruments' (LIs), but can take other forms. In addition, inspectors may issue Enforcement Notices to secure improvements to safety.

- No LIs or Enforcement Notices were issued during the period.

Reports detailing the above regulatory decisions can be found on the ONR website at <http://www.onr.org.uk/pars/>.

## 5 NEWS FROM ONR

### **Chief Nuclear Inspector appointment**

ONR announced the appointment of Dr Richard Savage as its new Chief Nuclear Inspector (CNI) to lead our regulatory activity. Richard is a Chartered Engineer with an extensive background in nuclear safety and regulation. He served as Head of the Defence Nuclear Safety Regulator, Ministry of Defence, before being appointed to ONR as a Deputy Chief Nuclear Inspector in 2013. He was Acting CNI since Dr Andy Hall's retirement in November 2015.

### **ONR Strategic Plan 2016-2020**

In March, ONR published its Strategic Plan covering 2016-2020. The plan sets out the factors that will influence our work and the assumptions we have made about regulating the nuclear sector in the next few years, as well as how we deliver the commitments we have made to the public, ministers and government, licensees, dutyholders and our staff. The plan was laid in Parliament on 22 March and can be viewed on the ONR website.

### **ONR's Regulation Matters**

Insight into ONR's work as an independent regulator of the nuclear industry can be found in ONR's Regulation Matters. The online publication (<http://www.onr.org.uk/regulation-matters.htm>) reports on the key themes and developments in each of ONR's regulatory programmes and provides an update about the ongoing changes at ONR. <http://www.onr.org.uk/index.htm>. For the latest news and updates from ONR visit the website and sign up for our ebulletin (<http://www.onr.org.uk/ebulletin/index.htm>).

## 6 CONTACTS

Office for Nuclear Regulation  
Redgrave Court  
Merton Road  
Bootle  
Merseyside  
L20 7HS

website: [www.onr.org.uk](http://www.onr.org.uk)

email: [ONREnquiries@onr.gsi.gov.uk](mailto:ONREnquiries@onr.gsi.gov.uk)

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