



**Office for Nuclear Regulation (ONR)  
Quarterly Site Report for  
Rolls-Royce Marine Power Operations Limited  
(RRMPOL) Raynesway, Derby  
Nuclear Fuel Production Plant (NFPP) and Neptune  
Reactor Licensed Sites**

**Report for period 1 October 2014 to 31 December 2014**

**Foreword**

This report is issued as part of ONR's commitment to make information about inspection and regulatory activities relating to the above sites available to the public. Reports are distributed quarterly to members of the Rolls-Royce Local Liaison Committee and are also available on the ONR website (<http://www.onr.org.uk/lc/>).

Site Inspectors from ONR usually attend the Rolls-Royce Local Liaison Committee meetings and will respond to any questions raised there. Any person wishing to enquire 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 or held other intervention activities on the following dates during the quarter:

- 3,17, 21,22 & 23 October
- 4,5 &12 November
- 5,9 & 10 December

Other ONR Inspectors participated in interventions with the licensee on the following dates in the quarter:

- 6,7,17,21,22 & 23 October
- 4 & 5 November
- 9,10 & 16 December

The Head of ONR's Propulsion Sub-Programme, along with the Site Inspector, attended a routine progress meeting on the 12 November.

## 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);
- provisions of 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 the licensee's (i.e. RRMPOl'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 ONR inspections covered the following areas:

- Emergency preparedness and response;
- Construction of new facilities on the site and control of any modifications to their designs;
- Operational Records storage and retention;
- Maintenance, inspection and testing of safety related structures, systems and components.

In October, a team of ONR inspectors observed the annual emergency exercise at the Neptune Reactor Site. The purpose of the exercise was to demonstrate to ONR the adequacy of the site's emergency arrangements, to deal with any accident or emergency on the site.

The exercise was judged by the ONR Site Inspector to be a satisfactory demonstration of the site's emergency arrangements.

In November a follow-up inspection was undertaken of the construction of the new Core Production facilities. As reported previously by ONR, RRMPOl has been improving its arrangements and effectiveness of implementation for both build assurance during construction and modifications to design of plant under construction. In this inspection the ONR inspectors found that whilst RRMPOl had made much progress in making and implementing improved arrangements, further work was required before the arrangements could be considered to be fully mature. One remaining area for improvement related to expanding on the guidance for the classification of modifications. The other outstanding matter was related to the full establishment of the arrangements to control construction and installation. In the meantime the ONR Site Inspector is satisfied with the adequacy of the interim build assurance arrangements.

In December a follow-up inspection of maintenance was undertaken for both licensed sites. In addition, an inspection of relevant records was undertaken looking specifically at records relating to maintenance activities. RRMPOl is in the process of implementing improved arrangements associated with maintenance. The ONR Inspectors concluded that RRMPOl had made many improvements since the last formal interaction. However, further improvements are required to the arrangements; these are linked into the generation of new safety cases for the existing facilities, with the implementation of the first such safety case due in July 2015. In the interim, evidence was provided of how RRMPOl has assured itself that the facilities are being subject to suitable maintenance and testing in accordance with the current safety case requirements. Based on the sample of maintenance records inspected the inspectors concluded that RRMPOl had effectively implemented adequate arrangements in this area.

ONR has discussed with RRMPOl progress with the Periodic Review of Safety (PRS) for the NFPP site. A PRS is required as a condition of the nuclear site licence and is undertaken typically every 10 years in line with international practice. The output takes the form of an identified programme of improvements to the plant and processes. ONR specialist inspectors have been following up matters arising from the PRS assessment completed at the end of November 2012. These matters are included within a PRS improvement programme. RRMPOl was due to report on the close out of its PRS in November 2014 with reference to the status of completion of its improvement programme. Accordingly RRMPOl submitted information to ONR in anticipation of this in July 2014. In assessing this work ONR concluded that RRMPOl had indeed made progress in addressing matters arising from the PRS assessment, however, as recognised by RRMPOl the progress was not sufficient for ONR to consider the improvement programme to be complete. RRMPOl has therefore provided a justification for continued operation while the PRS improvement programme is completed. The majority of the improvements identified are expected to have been completed by July 2015. ONR has written to RRMPOl confirming that we are content with this approach. ONR is expecting to complete the assessment of the adequacy of progress on the PRS improvement programme in the summer of 2015.

RRMPOl has made satisfactory commitments to address the outstanding issues referred to above, and the Site Inspector will monitor progress during future visits and potentially at a follow-up inspection. Should it prove necessary, ONR would take formal regulatory enforcement action to ensure that appropriate remedial measures are implemented to reasonably practicable timescales.

## **2.2 Other work**

During this period the Site Inspector held a routine meeting with safety representatives, to support their function of representing employees and receiving information on matters affecting their health, safety and welfare at work.

In October the Site Inspector attended a meeting of the Rolls-Royce Local Liaison Committee. At the meeting he presented the information provided in the last two quarterly reports.

### **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.

During this period there was one non-routine incident reported under RRMPOL's arrangements made for compliance with Licence Condition 7 (Incidents on the Site). The incident was identified by RRMPOL during a facility shutdown whilst undertaking thickness measurements for a vessel. Subsequent detailed analysis demonstrated that whilst the vessel was safe for further operation its working life may not be as long as originally expected. RRMPOL confirmed that the affected operations will not restart until the vessel, and another area of plant which could be subject to similar degradation, have completed examination and their remaining life re-justified. Whilst there was no immediate safety issue RRMPOL took the decision to notify ONR as there was degradation of a vessel which performed a nuclear safety role. The ONR Site Inspector is satisfied that the actions taken by RRMPOL are appropriate.

### **4 REGULATORY ACTIVITY**

ONR inspectors 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.

On the 1 October 2014 variations came into force for both site licenses reflecting the standard amendments made to Licence Conditions 1 and 3 (See Section 5 for details).

### **5 NEWS FROM ONR**

Insight into ONR's work as an independent regulator of the nuclear industry can be found in ONR's Quarterly News. The online publication (<http://www.onr.org.uk/onr-quarterly-report.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.

### **AMENDED LICENCE CONDITIONS**

Amendments have been made to the standard nuclear site licence conditions 1 and 3 as summarised below.

Licence Condition 1 (LC1, Interpretation) provides a set of definitions. ONR decided to amend the definition of "radioactive material" and "radioactive waste" to ensure they are consistent with ONR's regulatory requirements. The changes were necessary because other legislation, to which the Licence Conditions were linked, had amended the definitions.

Licence Condition 3 (LC3, Control of Property Transactions) requires the licensee to make and implement adequate arrangements to control property transactions on licensed nuclear sites. LC3 was prescriptive and required the licensee to obtain ONR permission ("consent") before it let, conveyed, assigned or transferred any part of the licensed site to a third party. It made no allowance for the nuclear safety significance of transactions. Changes in the nature of the nuclear industry, with an increasing presence of contractors or other third parties on licensed sites, have resulted in growing numbers of LC3 applications, many of which have little or no nuclear safety significance. This has imposed an unintended regulatory burden on licensees and is an inefficient use of ONR's specialist resource and time. The principal change is to require the licensee to make and implement adequate arrangements that control

all property transactions affecting the site and include provision for the classification and management of all property transactions according to their safety significance and their impact on the licensee's control of the site.

ONR's licence condition handbook has been updated and is available via the ONR website at <http://www.onr.org.uk/silicon.pdf>

## 6 CONTACTS

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