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Civil Nuclear Reactor Program

Assessment of NNB Genco Procedures for Instructions to Persons on the Site

Assessment Report: ONR-CNRP-AR-12073 Revision 1 4th January 2013

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ASSESSMENT REPORT

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EXECUTIVE SUMMARY

ASSESSMENT OF NNB GENCO (NNB) PROCEDURES FOR INSTRUCTIONS TO PERSONS ON THE SITE.

BACKGROUND

In July 2011, NNB made an application for a Nuclear Site Licence to install and operate a nuclear installation at its site located at Hinkley Point C (HPC). This report presents assessment of procedures (arrangements) put in place by NNB for compliance with Licence Condition 9 (LC9).

ASSESSMENT AND INSPECTION WORK CARRIED OUT BY ONR

Regular quarterly meetings were held with NNB to review the procedures being developed and sample supporting documents.

MATTERS ARISING FROM ONR'S WORK

All issues raised during the assessment have been satisfactorily closed out.

CONCLUSIONS

I am content that NNB currently has adequate procedures in place to ensure compliance with LC9 and that these procedures would satisfy LC9 requirements for early phases of the construction program.

RECOMMENDATION

As far as LC9 is concerned, I recommend that a Nuclear Site Licence should be granted to NNB to install and operate a nuclear installation at its site located at Hinkley Point C.

I also recommend that NNB's procedures (arrangements) for LC9 compliance and their implementation are inspected by Hinkley Point C's nominated site inspector during future phases of the project to ensure they remain adequate.

LIST OF ABBREVIATIONS

| ALARP | As low as is reasonably practicable |
|--------|--|
| BSL | Basic Safety level (in SAPs) |
| BSO | Basic Safety Objective (in SAPs) |
| BMS | (ONR) How2 Business Management System |
| HSE | Health and Safety Executive |
| IAEA | International Atomic Energy Agency |
| LC | Licence Condition |
| ONR | Office for Nuclear Regulation (an agency of HSE) |
| PCER | Pre-construction Environment Report |
| PCSR | Pre-construction Safety Report |
| PID | Project Initiation Document |
| PSA | Probabilistic Safety Assessment |
| PSR | Preliminary Safety Report |
| RGP | Relevant Good Practice |
| SAP | Safety Assessment Principle(s) (HSE) |
| SFAIRP | So far as is reasonably practicable |
| SSC | System, Structure and Component |
| TAG | Technical Assessment Guide(s) (ONR) |
| TSC | Technical Support Contractor |
| WENRA | Western European Nuclear Regulators' Association |
| | |

TABLE OF CONTENTS

| 1. | INTRODUCTION | 1 |
|----|--|---|
| 2. | BACKGROUND | 1 |
| 3. | ASSESSMENT AND INSPECTION CARRIED OUT BY ONR | 1 |
| 4. | MATTERS ARISING FROM ONR WORK | 3 |
| 5. | CONCLUSIONS | 3 |
| 6. | RECOMMENDATIONS | 3 |
| 7. | REFERENCES | 4 |
| | | |

1 INTRODUCTION

1 This report records assessment of NNB Generation Company (NNB GenCo) procedures (arrangements) and documentation relating to 'instructions to the persons on the site' (LC9).

2 BACKGROUND

- 2 In July 2011, NNB GenCo (NNB) made an application for a Nuclear Site Licence to install and operate a nuclear installation at its site located at Hinkley Point C (HPC). The Licence Application also contained a 'compliance matrix'. The compliance matrix for LC9 divides arrangements for compliance into: pre-construction, construction, non-active commissioning, radioactive commissioning, operation and decommissioning, phases.
- 3 The pre-construction phase is in turn divided into pre-licence granted and post-licence granted phases. The scope of this assessment report covers the period of pre-licence granted phase, however it is envisaged that compliance procedures (arrangements) will be reviewed and revised as the activities progress from one phase to the next.

3 ASSESSMENT AND INSPECTION WORK CARRIED OUT BY ONR

- 4 LC9 states that "The licensee shall ensure that every person authorised to be on the site receives adequate instruction (to the extent that this is necessary having regard to the circumstances of that person being on the site) as regards the risks and hazards associated with the plant and its operation, the precautions to be observed in connection therewith and the action to be taken in the event of an accident or emergency on the site".
- 5 This condition does not formally require the licensee to make and implement adequate arrangements. However, suitable written procedures should be produced to enable compliance with this condition to be visible. NNB's compliance matrix shows that procedure NNB-OSL-PRO-000065 titled 'Manage Visitors' is applicable to all phases of the project from licence granted to decommissioning. Procedure NNB-OSL-PRO-000023 titled 'Hinkley Point C (HPC) Site Inductions' is also applicable to all phases. However, it is envisaged that this procedure will be reviewed and revised for each phase. A note in the compliance matrix states that 'only the procedure, supporting documents, inputs and outputs pertaining to the nuclear licensed site form part of Nuclear Site Licence compliance'.
- 6 Regular quarterly meetings ^(Ref. 1) have been held with NNB and attended by ONR's LC9 lead, the Hinkley Point C nominated site inspector, the ONR Field Operations Directorate (FOD) liaison inspector and the Environment Agency (EA) site inspector. The purpose of these meetings was to review the procedures being developed and sample the supporting documents. As a result of these meetings procedure NNB-OSL-PRO-000023 was revised and re-issued to take into account comments made by the regulators.
- 7 It is important to note that NNB's activities are currently regulated by HSE's FOD and the work is currently conducted under Construction Design and Management Regulations (CDM Regs) and other relevant statutory instruments. Regulation 22 of the CDM Regs requires that the 'Principal Contractor' should take all reasonable steps to ensure every worker receives suitable site induction. CDM Regs and LC9 both require induction training

and during various meetings, it was agreed that compliance with these can run in parallel and the same training material can be used to demonstrate compliance with both requirements.

- 8 In this assessment report it is not intended to go through historical development of the training documentation. It is however important to note that opportunity was taken during a quarterly review meeting to attend an induction training course. In addition to ONR and EA inspectors, the local FOD construction inspector also attended the training session. The session reflected the work (activities) carried out at the time and was found to be satisfactory. Prior to the training a formal invitation was sent to all attendees and they were provided with a 'welcome to Hinkley Point C induction' leaflet. Objectives of the training and assessment were outlined and HPC site director presented an introductory session, which covered Health Safety & Quality policy, Stop Think Act Review (STAR) principles, safety culture, questioning attitude, etc. The work and hazards at the site were comprehensively discussed together with emergency arrangements, in general the training provided was found to be satisfactory.
- 9 NNB provided ONR (and FOD) with a compliance pack ^(Ref. 2) which contained:
 - Procedure NNB-OSL-PRO-000023, titled 'Provide Hinkley Point C (HPC) Site Inductions',
 - Hinkley Point C 'Site Application' form,
 - Procedure NNB-HRE-PRO-000003, titled 'Recruit Employees',
 - Procedure NNB-OSL-PRO-00065, titled 'Manage Visitors',
 - Procedure NNB-OSL-PRO-000013, titled 'Management of Training',
 - Training request and needs analysis, instructional aim and learning objectives worksheet, lesson plan and HPC site induction training material
 - A sample of attendance records, trainee reaction summary, classroom/workshop instructor evaluation and nomination of site certified instructor form.
- 10 A process flow diagram in procedure NNB-OSL-PRO-000013 demonstrates NNB's systematic approach to training (i.e. analyse, design, develop, implement and evaluate). The evidence suggests that this process has been followed. A process flow diagram in procedure NNB-OSL-PRO-000023 outlines the process for obtaining unescorted access to site. It requires that as a pre-requisite all staff requiring unescorted access to site should attend a Customer Client Nuclear Safety Group (CCNSG) training course. In addition all contractors must attend a 'Triple Bar for Construction' training course. NNB's own employees attend an induction training course, which covers the same material as triple bar course. Following completion of these pre-requisites people requiring unescorted access are required to attend a formal site induction training and be assessed prior to being issued with an unescorted access pass to the site.
- 11 NNB has carried out a 'self' and an 'independent' assessment and following discussions with the regulators the main procedure NNB-OSL-PRO-000023 was reviewed, revised and re-issued. This document includes a requirement to carry out three yearly refresher training. The compliance pack was subsequently updated ^(Ref. 2). Sampling of the information contained in the compliance pack showed that adequate procedures were in place to ensure compliance with LC9 requirements. The training material sampled contained the risk and hazards associated with the site and actions to be taken in the event of an accident or

emergency. It should be noted that the relevant procedures will be reviewed and updated as necessary, as activities progress from one phase to the next.

- 12 NNB ^(Ref. 3) has also informed ONR that 'transient increases in hazards (e.g. a short term increase in vehicle movements, severe weather, etc.) are communicated verbally at the Principal Contractor's daily coordination meeting to all contractor representatives. Perpetual increases in hazards (e.g. resulting from changing emergency arrangements, etc.) are also communicated at daily coordination meetings and also communicated by signage and by tool-box talks and longer briefings as necessary. Daily coordination meetings are minuted and information communicated via tool-box talks and briefings is recorded and signed attendance lists kept as paper records on site. Attendance at Site Inductions is recorded in SAP. Future changes to site risks or arrangements are communicated via revisions of the Construction Phase Plan and in revisions to the site induction for new starters and to existing previously inducted workers via coordination meetings, tool-box talks and briefings'. Induction training is revalidated every three years.
- 13 NNB intends to carry out a Nuclear Site Licence readiness review in July/August 2012, and action arising from this review will be monitored and dealt with through the organisation learning system. I am content that NNB has adequate processes in place to deal with any recommendations from this review and do not believe any findings will materially affect the conclusions and recommendations of this report.

4 MATTERS ARISING FROM ONR WORK

14 All issues raised during the assessment have been satisfactorily closed out.

5 CONCLUSIONS

15 Based on sampling of the evidence provided, I am content that NNB currently has adequate procedures (arrangements) in place to ensure compliance with LC9, and that these arrangements would satisfy LC9 requirements for early phases of the construction programme.

6 **RECOMMENDATIONS**

- 16 As far as LC9 is concerned, I recommend that a Nuclear Site Licence should be granted to NNB to install and operate a nuclear installation at its site located at Hinkley Point C.
- 17 I also recommend that NNB's procedures (arrangements) for LC9 compliance and their implementation are inspected by Hinkley Point C's nominated site inspector during future phases of the project to ensure they remain adequate.

7 REFERENCES

- 1 Level 4 HPC LC9 Up Date Meetings, TRIM file references 4.5.2694 and 4.5.5664.
- 2 Compliance Pack (TRIM 2012/306178) Containing:

Procedure NNB-OSL-PRO-000023, titled 'Provide Hinkley Point C (HPC) Site Inductions', Hinkley Point C 'Site Application' form, Procedure NNB-HRE-PRO-000003, titled 'Recruit Employees', Procedure NNB-OSL-PRO-00065, titled 'Manage Visitors', Procedure NNB-OSL-PRO-000013, titled 'Management of Training', Training request and needs analysis, instructional aim and learning objectives worksheet, lesson plan and HPC site induction training material A sample of attendance records, trainee reaction summary, classroom/workshop instructor evaluation and nomination of site certified instructor form.

3 Email from NNB to ONR – Response to remaining query. TRIM 2012/297504