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NNB GenCo Licence Condition 10 – Training Compliance Arrangements

Assessment Report: ONR-CNRP-AR-12-095 Revision 1

21 January 2013

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ASSESSMENT REPORT

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Project:	Granting of a Nuclear Site Licence to NNB Generation Company Ltd to install and operate two EPR units at Hinkley Point C
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EXECUTIVE SUMMARY

Background

NNB Generation Company Ltd (NNB GenCo) has applied for a nuclear site licence to install and operate a twin EPR nuclear power reactor at Hinkley Point C in Somerset. Before granting a nuclear site licence, the Office for Nuclear Regulation (ONR) must be satisfied that NNB GenCo has adequate management structures, capability and resources to discharge the obligations associated with holding a nuclear site licence.

As part of ONR's assessment of this application, a review of the prospective licensee's arrangements for compliance with the conditions to be attached to a nuclear site licence has been conducted in accordance with paragraph 98 of ONR's publication 'Licensing Nuclear Installations'. This paragraph states that 'ONR will seek an assurance that the applicant has suitable and sufficient organisational structure, resources and competencies to lead and manage for safety by applying Safety Assessment Principles MS1 to MS4 on "leadership and management for safety" and the suite of documents set out on the ONR website. The licensee will also need to demonstrate that its management system and arrangements for complying with the site licence conditions are adequate and that they are being implemented effectively before the licence is granted'.

This assessment informs a judgement on whether a nuclear site licence should be granted to NNB GenCo to construct, commission and operate a power reactor at Hinkley Point C in Somerset. It considers the adequacy of NNB GenCo's arrangements to meet the requirements of Licence Condition 10 'Training', and their implementation for the stage of development that NNB GenCo has reached at this pre-construction stage of the project. It is recognised that the arrangements will continue to evolve as the project proceeds, and continuing ONR interaction with NNB GenCo is anticipated to gain assurance that the arrangements remain fit for purpose and that they are implemented effectively. NNB GenCo has concluded its own Self Assessment and Independent Assessment Challenge and Oversight assessment of the Licence Condition 10 arrangements and the findings from these assessments have informed ONR's assessment.

Assessment and inspection work carried out by ONR

This assessment has been informed by a number of working level meetings over the last two years plus discussions with NNB GenCo staff as part of a targeted intervention in support of Licence Condition 12 'Duly Authorised and Other Suitably Qualified and Experienced Persons' which took place in May 2012. The working level meetings provided a forum for dialogue, for influencing the development of NNB GenCo's Licence Condition 10 training arrangements, and for monitoring progress with development of the arrangements.

NNB GenCo was able to demonstrate via the working level meetings that its arrangements for compliance with Licence Condition 10 have the essential elements of a Systematic Approach to Training approach as defined in ONR Technical Assessment Guide T/AST/027. The ongoing dialogue ONR and NNB GenCo have had in support of this workstream over the last two years has yielded positive benefits in terms of the approach adopted by NNB GenCo and the design of the arrangements.

The working level meetings were supplemented by structured discussions with a sample of members of staff undertaking nuclear safety significant roles from various parts of NNB GenCo's organisation, with particular emphasis on the Design Authority. This was undertaken as part of the Licence Condition 12 intervention in May 2012. The discussions primarily related to the quality and benefit of training courses delivered to date. A working level meeting was held after the discussions to clarify progress with implementation of NNB GenCo's training strategy.

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As part of ONR's licensing intervention strategy, ONR workstream leads for technical disciplines have assessed the application of the training arrangements in their respective disciplines. This assessment report has taken into account their views of the adequacy of NNB GenCo's training arrangements.

The Hinkley Point C project is in its early phases and the training arrangements are still being refined and developed. NNB GenCo has made significant progress and has established the key attributes of a Systematic Approach to Training. It was clear from the attitudes of staff involved in the working level meetings, during the competence intervention in May 2012 and the evidence of senior management support that there is an ongoing forward momentum within the company to continue with positive development of the arrangements.

The Hinkley Point C project lifecycle has a number of key phases such as design, construction, commissioning, operation, shutdown and decommissioning. The Licence Condition 10 compliance arrangements will need to be robust and flexible enough to cope with training requirements during each of these phases. During the design, construction and commissioning phases, NNB GenCo will need sufficient, competent staff to act as an 'intelligent customer' for the products and services it commissions and receives from its supply chain and training will need to support this. The focus will shift during commissioning and into operations to a requirement for competent operational staff. ONR will continue to monitor the development of these arrangements as the project progresses.

Matters arising from ONR's work

NNB GenCo's arrangements are still evolving and implementation is at an early stage. ONR has attended several training events over the last two years as an observer and has provided feedback to NNB GenCo to assist in the development of its arrangements. At the time of this assessment, NNB GenCo was in the process of introducing a new training plan based on external experience i.e WANO and INPO, experience with implementation of the plan to date and training needs identified by the competence assessment exercise. ONR will need to monitor the ongoing development and implementation of the arrangements.

Conclusions

This report presents the findings of ONR's assessment of NNB GenCo's arrangements for Licence Condition 10 'Training'.

I am satisfied that that NNB GenCo's arrangements for Licence Condition 10 have adequately addressed the expectations of relevant standards. The arrangements and implementation are still evolving, but outstanding issues have been recognised and there is a strong forward momentum within the company to carry this development forward. This gives me confidence they are sufficiently well advanced for this stage of the project.

Recommendations

My recommendations are as follows:

- 1 NNB GenCo's arrangements for compliance with Licence Condition 10, and the implementation of these arrangements, should be considered adequate to support a decision by ONR to grant a nuclear site licence for Hinkley Point C.
- ONR should continue to monitor and influence the development of NNB GenCo's training arrangements.

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LIST OF ABBREVIATIONS

BMS Business Management System

CM Company Manual HPC Hinkley Point C

HSE Health and Safety Executive

IACO Independent assessment Challenge and Oversight

IAEA International Atomic Energy Agency
INPO Institute of Nuclear Power Operations

IOSH Institute of Occupational Safety and Health

IR Intervention Report
LC Licence Condition

ONR Office for Nuclear Regulation (an agency of HSE)

PAR Project Assessment Report

SA Self Assessment

SAP Safety Assessment Principle(s) (HSE)

SAT Systematic Approach to Training

SQEP Suitably Qualified and Experienced (persons)

TAG Technical Assessment Guide(s) (ONR)

TRAC Training Review and Advisory Committee

WANO World Association of Nuclear Operators

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Annex 1: Working level meetings and interventions to discuss LC10 compliance

arrangements.

Annex 2: Documents considered

1 INTRODUCTION

1.1 Background

- NNB Generation Company Ltd (NNB GenCo) has applied for a nuclear site licence to install and operate a twin EPR nuclear power reactor at Hinkley Point C in Somerset. As part of ONR's assessment of this application, a review of the prospective licensee's arrangements for compliance with the conditions to be attached to the nuclear site licence has been conducted.
- This report presents the findings of the assessment of NNB GenCo's compliance arrangements for Licence Condition (LC) 10 'Training'. Relevant documentation was provided by NNB GenCo to support a series of working level meetings over the last two years and the competence intervention undertaken in May 2012. Assessment was undertaken in accordance with the requirements of the Office for Nuclear Regulation (ONR) procedure AST/003 (Ref. 1). The ONR Safety Assessment Principles (SAPs) (Ref. 2), together with supporting Technical Assessment Guides (TAGs) (Ref. 3), have been used as the basis for this assessment.

1.2 Scope

The scope of this report covers the adequacy of NNB GenCo's arrangements for compliance with the requirements of LC 10 'Training' prior to drafting of ONR's Project Assessment Report (PAR) for licensing. The assessment has been undertaken before NNB GenCo's arrangements are fully developed but at a point when sufficient progress has been made to be able to assess their adequacy for this stage of the project. This assessment has been undertaken following a Self Assessment (SA) and an Independent Assessment Challenge and Oversight (IACO) assessment of the LC10 arrangements by NNB GenCo.

1.3 Methodology

- The methodology for the assessment follows ONR BMS document AST/003, Permissioning Reports (Ref. 1), in relation to mechanics of assessment within the Office for Nuclear Regulation (ONR).
- 7 This assessment focussed on the arrangements for compliance with the requirements of Licence Condition 10 'Training'. The assessment considers the process and documented procedures for the management of training.

2 ASSESSMENT STRATEGY

- The intended assessment strategy for NNB GenCo's arrangements for complying with LC10 'Training' is set out in this section. It identifies the scope of the assessment and the standards and criteria that have been applied.
- ONR and NNB GenCo have been engaged in a series of working level meetings to discuss the arrangements NNB GenCo has been developing to comply with the requirements of LC 10. NNB GenCo's Head of Training, reporting to the Pre-Operations Director has been the NNB GenCo workstream lead.
- ONR has used the working level meetings to advise, guide and monitor progress with development and implementation of the NNB GenCo's training arrangements. These meetings were supplemented by structured discussions with a sample of staff undertaken as part of an ONR intervention to assess the effectiveness of implementation of NNB GenCo's arrangements for LC 12 as part of the licensing process. A working level meeting was held after the discussions to clarify progress with implementation of NNB GenCo's training strategy. The reports of the working level meetings and the discussions are listed in Annex 1.

2.1 Standards and Criteria

The relevant standards and criteria adopted within this assessment are principally the Safety Assessment Principles (SAPs) (Ref. 2), internal ONR Technical Assessment Guides (TAGs) (Ref. 3), relevant national and international standards and relevant good practice informed from existing practices adopted on UK nuclear licensed sites. The key SAPs and relevant TAGs are detailed within this section. National and international standards and guidance have been referenced where appropriate within the assessment report. Relevant good practice, where applicable, has also been cited within the body of the assessment.

2.2 Safety Assessment Principles

The key SAP EHF.8 Personnel Competence applied within the assessment is included within Table 1 of this report. This SAP refers to an organisation needing a process for identifying and delivering competence; identification of competence requirements; training needs analysis; training programme design and implementation; formal assessment of competence and evaluation.

2.2.1 Technical Assessment Guides

- The following Technical Assessment Guide has been used as part of this assessment (Ref. 3):
 - T/AST/027 Issue 3 'Training and Assuring Personnel Competence'.

2.2.2 National and International Standards and Guidance

- The following international standards has been used as part of this assessment (Refs 4 and 5):
 - Technical Report Series 380 'Nuclear Power Plant Personnel Training and its Evaluation: A Guidebook'.
 - IAEA Safety Standard GS-R-3 'The Management System for Facilities and Activities'.

The Technical Assessment Guide T/AST/027 incorporates the key aspects of GS-R-3 and Technical Report Series 380.

2.3 Use of Technical Support Contractors

16 No supporting contractors were used.

2.4 Integration with other Assessment Topics

- 17 LC 12 'Duly Authorised and Other Suitably Qualified and Experienced Persons' requires that personnel whose activities have the potential to impact on nuclear safety are suitably qualified and experienced (SQEP) to carry out their jobs. Since NNB GenCo must have arrangements in place to define and deliver training needed to sustain competence and to meet the requirements of LC 10 'Training', NNB GenCo's arrangements for LC 10 have been assessed in conjunction with its arrangements for LC 12 (see ONR-CNRP-AR-12-096 'NNB GenCo Licence Condition 12 Duly Authorised and Other Suitably Qualified and Experienced Persons compliance Arrangements').
- As part of ONR's licensing intervention strategy, workstream leads for control and instrumentation, electrical engineering, structural integrity, civil engineering, mechanical engineering, probabilistic safety analysis, internal hazards, external hazards, human factors and safety case production have assessed the adequacy of NNB GenCo staff competence in relation to their particular technical disciplines as recorded in their individual assessment reports (see Annex 2). This assessment has drawn on the output of these discipline assessments.

2.5 Out-of-scope Items

19 No out of scope items have been identified.

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3 LICENSEE'S SAFETY CASE

20 NNB GenCo has not provided its compliance arrangements for LC10 'Training' as a formal safety case; rather they have been presented as a suite of documentation to support the working level meetings held over the last two years. Documentation considered during this assessment is identified in Annex 2.

4 ONR ASSESSMENT

This assessment has been carried out in accordance with ONR procedure AST/003, Permissioning Reports (Ref. 1).

4.1 Scope of Assessment Undertaken

- The aim of my assessment was to gain assurance that NNB GenCo's arrangements for providing suitable training for all those on site who have responsibility for any operations which may affect safety are adequate for this stage of the project, and that the arrangements will continue to develop as the project progresses.
- I have engaged with NNB GenCo through a series of working level meetings (see Annex 1) to discuss the development and adequacy of NNB GenCo's arrangements based on the requirements and guidance identified in section 2 of this report.

4.2 Assessment

- This assessment is based primarily on the documentation presented during a series of working level meetings with NNB GenCo carried out over the last two years (see Annex 1), combined with attendance at a sample of NNB GenCo training courses, and discussions held with a sample of NNB GenCo staff during the LC 12 intervention which was undertaken on 15, 16, 17, 18 and 28 May 2012.
- The discussions provided me with an opportunity to discuss the quality and effectiveness of training courses delivered to date with a sample of NNB GenCo staff. The sample of staff covered a range of disciplines with a particular focus on the Design Authority, reflecting the current stage of the project lifecycle. The Intervention Report (IR) ONR-NNB GenCo-IR-12-138 (TRIM Ref. 2012/263681, see Annex 1) provides an account of my discussions. The IR has been a source of information for this assessment. A working level meeting was held with NNB GenCo on 22 June 2102 to clarify progress with implementation of the training strategy.
- The assessment focussed on the adequacy of NNB GenCo's management of training arrangements as set out in NNB GenCo's training policy, strategy, training procedures, and the organisation of NNB GenCo's training function. Relevant documents are referenced in Annex 2.

4.2.1 Management of Training Arrangements

- NNB GenCo commenced development of its training arrangements in early 2010. The arrangements comprise:
 - Training Policy signed by the Managing Director and setting out NNB GenCo's vision of training;
 - Training Strategy describes the planned strategy to deliver technical training for NNB GenCo staff and long term contractors in order to develop and maintain a nuclear competent workforce. It identifies the requirement to provide a number of formal training programmes covering specific technical areas and general employee awareness. The programmes have been developed using a Systematic Approach to Training (SAT);
 - Procedures present the framework used by NNB GenCo to ensure that individuals receive the training they need in order to perform their assigned roles.
- NNB GenCo's training arrangements are set out in the following suite of procedures which were extant at the time of the assessment:

- Management of Training NNB-OSL-PRO-000013 identifies the training process and provides guidance to individuals who are involved in identifying, producing and receiving training within NNB GenCo using a systematic approach to training (SAT).
- Determine Training Needs NNB-OSL-PRO-000084 defines the process for ensuring that potential training needs are properly identified and evaluated, and that the results are used to inform the subsequent phases of SAT.
- Design Training NNB-OSL-PRO-000085 defines the process for ensuring that training aims and development objectives are established.
- Develop Training NNB-OSL-PRO-000086 defines the process for establishing learning objectives, selecting training methods, reviewing and developing training materials, and piloting and evaluating training.
- Implement Training NNB-OSL-PRO-000087 defines the process for establishing and scheduling training resource requirements, preparing for training delivery, and implementing a training event.
- Evaluate Training NNB-OSL-PRO-000088 defines the process for evaluating training effectiveness, analysis the results of the evaluations and implementing improvement actions.
- As part of ONR's licensing intervention strategy, ONR workstream leads for technical disciplines have assessed the application of the training arrangements in their respective disciplines. This assessment report has taken into account their views of the adequacy of NNB GenCo's training arrangements.
- I have reviewed the procedures and I am satisfied that they describe NNB GenCo's arrangements for a SAT approach to training and meet ONR's expectations as set out in the following sections of T/AST/027 Training and Assuring Personnel Competence:
 - Identification of learning objectives and training needs;
 - Training programme design;
 - Selection of appropriate training methods and media;
 - Assessment methods:
 - Assessment of competence see Assessment Report ONR-CNRP-AR-12-096 'NNB GenCo Licence Condition 12 - Duly Authorised and Other Suitably Qualified and Experienced Persons Compliance Arrangements';
 - Assessment methods;
 - Evaluation of training effectiveness;
 - Training records.
- NNB GenCo has carried out a comprehensive Self Assessment and Independent Challenge and Oversight assessment (see Annex 2). Both assessments focussed on assessing the adequacy of implementation of NNB GenCo's training arrangements. The findings from these assessments have been shared with me and I judged them to be of a high quality. NNB GenCo has advised that it intends to improve its arrangements based on the assessment findings.
- My assessment of NNB Genco's arrangements to meet with expectations set out in T/AST/027 relating to 'frequency of assessment' and 'organisation and support of the training function' is discussed in sections 4.2.2 and 4.2.3 respectively.

4.2.2 Training Strategy Implementation

- NNB GenCo's initial training strategy, as presented to ONR on 30 July 2010 see Annex 1), focussed on developing a competent initial complement of staff via a 'baseline training programme' supported by a dedicated training committee and a cyclical training programme. As other technical area training programmes were developed and delivered, it was intended that individuals would transition from the baseline to their applicable programme.
- I subsequently observed that the cyclical training programme and the Training Review and Advisory Committee (TRAC) had been established. Technical training has largely been left to the various NNB GenCo functional areas to arrange to satisfy the needs of specific individuals, pending the results of the baseline role competency assessment exercise which are expected to identify generic and specific technical training requirements.
- Cycle 0 and Cycle 1 training was developed to provide all NNB GenCo staff with a basic awareness of certain fundamentals relating to nuclear safety, nuclear site licensing, environmental management and security.
- I attended Cycle 0 and Cycle 1 training events on 29 September 2010 and 14 December 2010 respectively. Cycle 0 training, which was provided by an external contractor to an NNB GenCo specification, focussed on the nuclear site licence, powers of the regulator, licensee responsibilities, documents records management, and nuclear safety culture. Cycle 1 training, which was delivered by in-house resources, focussed on environmental awareness and legislation, staff competency assessment, the nuclear baseline, security.
- I noted that NNB GenCo was making a good attempt to raise staff awareness of topics that are important to the development of its business through the Cycle 0 and Cycle 1 training events. Although the training was mandatory, it was clear that some individuals had failed to attend and had not notified the training coordinator in advance. Feedback was requested by the training coordinators and mostly received from the attendees at the end of the training events. NNB GenCo advised that it intended to use the feedback to improve future staff awareness training events. Feedback received from discussions with staff as part of the competency intervention was variable with experienced staff feeling that the courses repeated what they already knew.
- NNB GenCo shared a training plan with me at a working level meeting on 8 November 2011 (see Annex 1). The plan set out NNB GenCo's training priorities for the period up to the end of 2012 calendar year. Key points identified in the plan were:
 - Cyclic training is replaced by generic 'NNB GenCo Induction' and NNB GenCo Foundation Programme' training events that will be delivered to all NNB GenCo staff in recognition of the fact that not all staff have been fully inducted into the organisation and staff headcount has increased considerably since cycle 0 and cycle 1 training was first run. All new staff will attend a NNB GenCo induction event. An e-learning package has been developed for existing staff that have not been formally inducted previously. All staff is expected to undergo one of the two forms of induction training as a pre-requisite for being granted/retaining their security pass.
 - The emphasis of the foundation course is on common themes that have emerged from the competency assessment exercise including nuclear safety culture, nuclear professionalism, nuclear site licence, nuclear security, environmental awareness and various NNB GenCo integrated management system processes and procedures. It is intended that new staff will attend an event within their first 100 days of joining NNB GenCo. Existing staff will also be expected to attend. Training

- will be delivered by training function staff supported by subject matter experts. A pilot event was scheduled for July 2012.
- Training appropriate to the specific needs of the HPC site is being developed and implemented covering IOSH Managing Safely, CDM Overview, and Triple Bar for Construction. This training was still under development at the time of preparing this report.
- Generic EPR awareness events have been developed aimed at various audiences, with the depth of the subject matter tailored to suit the target audience. These courses have been running for sometime and feedback from discussions with NNB GenCo staff as part of the competence intervention was very positive.
- A 'technical fundamentals' training approach is currently being developed and an 'engineering fundamentals' approach should be developed later in 2012.
- My judgement is that the approach advised by NNB GenCo in its training plan is soundly based, comprehensive and should address its short term training needs. The adequacy of the training plan and the overall training strategy appears to be being kept under regular review and update in the light of experience. This gives me confidence that NNB GenCo is proactively evaluating the effectiveness of its approach. I will continue to monitor development and implementation.
- I have not discussed 'frequency of assessment' of NNB GenCo's staff competence and training needs with NNB GenCo to date since delivery of the training plan is in its early stages of implementation. This will be addressed as part of ongoing interventions between ONR and NNB GenCo.

4.2.3 Organisation of the Training Function

- The training function extant at the time of preparing this report comprised 16 staff reporting to the Head of Training. The Head of Training reports to the Pre-Operations Director who in turn reports to the NNB GenCo Board. The training requirements identified in section 4.2.2, paragraph 36 of this report will be delivered primarily by the training function supported by NNB GenCo subject matter experts and external contractors.
- NNB GenCo's current plan is to recruit an additional 15 training instructors in 2013. All NNB GenCo training instructors currently in post are INPO certified. An instructor certification programme will be developed as part of the training plan to ensure that future recruits are competent to fulfil their roles.
- NNB GenCo intends to transfer responsibility for construction training from the Pre-Operations Director to the HPC Site Construction Director, albeit that a clear functional link will be maintained between the HPC Technical Training Manager and the Head of Training.
- My judgement is that the organisation and headcount of the training function is adequate for the current stage of NNB GenCo's development. ONR will continue to monitor the development of the training function as part of ongoing interventions between ONR and NNB GenCo.

4.3 Comparison with Standards, Guidance and Relevant Good Practice

NNB GenCo's arrangements for Licence Condition 10 Training have been assessed against the requirements and of the standards and associated guidance identified in paragraph 2.2 of this report. Technical Assessment Guide T/AST/027 'Training and

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- Assuring Personnel Competence' sets out ONR's expectations of licensees' training processes, and NNB's compliance arrangements have been assessed against this TAG.
- NNB GenCo's management of training arrangements are clearly defined and documented. They meet ONR's expectations as set out in T/AST/027.

5 CONCLUSIONS AND RECOMENDATIONS

5.1 Conclusions

Summary Remarks

- NNB Generation Company Ltd (NNB GenCo) has applied for a nuclear site licence to install and operate a twin EPR nuclear power reactor at Hinkley Point C in Somerset. As part of ONR's assessment of this application, a review of the prospective licensee's arrangements for compliance with the conditions to be attached to the nuclear site licence has been conducted.
- This report presents the findings of my assessment of NNB GenCo's compliance arrangements for Licence Condition 10 'Training'. The assessment considers the arrangements themselves, which are documented in the management of training procedure, the level of implementation up to the end of July 2012, and future development needs. The assessment has been based on the requirements of ONR Technical Assessment Guide T/AST/027.
- The assessment considers the adequacy of NNB GenCo's arrangements, and their implementation, for the stage of development that NNB GenCo has reached at this point. It is recognised that the arrangements will continue to evolve as the project proceeds, and continuing interaction with NNB is anticipated to gain assurance that the arrangements remain fit for purpose and that they are implemented effectively.
- The key elements assessed have been NNB GenCo's management of training arrangements, training strategy implementation and the organisation of NNB GenCo's training function. NNB GenCo was able to demonstrate that its arrangements for compliance with Licence Condition 10 have the essential elements of a process for analysis of training needs, training design, development, delivery and evaluation as defined in T/AST/027. The ongoing dialogue ONR and NNB GenCo have had in support of this workstream over the last two years has yielded positive benefits in terms of the approach adopted by NNB GenCo and the design of the arrangements.
- The HPC project is in its early phases and the arrangements are still being refined and developed. Implementation has not yet matured but NNB GenCo has made significant progress and has established the key attributes of training arrangements. It was clear from the enthusiasm and attitudes of staff involved in the working level meetings over the last two years, the training aspects of the competence intervention in May 2012 and the evidence of senior management support that there is an ongoing forward momentum within NNB GenCo to continue with the positive development of its arrangements.
- The HPC project lifecycle has a number of key phases such as design, construction, commissioning, operation, shutdown and decommissioning. The Licence Condition 10 compliance arrangements will need to be robust and flexible enough to cope with the varying staff competency requirements during in each of these phases. During the design, construction and commissioning phases, NNB GenCo will need sufficient, competent staff to act as an 'intelligent customer' for the products and services it commissions and receives from its supply chain.
- The focus will shift during commissioning and into operations to a requirement for competent operational staff. ONR will continue to monitor the development of NNB GenCo's training arrangements as the project progresses as a fundamental mechanism in developing and sustaining competence. The working level meetings gave me confidence that NNB GenCo understands the nature of this shift in emphasis and will adjust its plans and capability to meet the requirements.

IIS Rating LC10 Training

NNB GenCo has made significant progress over the past two years which has been reflected in the working level meetings supported by the training aspects of the competence intervention in May 2012. The intervention, reinforced by a follow up working level meeting in June 2012, confirmed that satisfactory arrangements have been developed albeit the implementation is in its early stages. In recognition of the success that has been achieved and the strong positive forward momentum an **IIS rating of 3** (adequate) is allocated.

Concluding Remarks

- NNB GenCo has made significant progress with the development and implementation of its training arrangements over the last two years. It has designed, documented and substantially implemented adequate arrangements for this stage of the HPC project. There is recognition of the need to review and develop the arrangements as the project progresses. This requirement will increase as the project moves through its phases.
- During the June 2012 working level meeting NNB GenCo demonstrated that its arrangements had been satisfactorily implemented together with its commitment to taking into account lessons learned from its own Self Assessment and Independent Assessment Challenge and Oversight assessment. A number of improvements were identified by ONR and NNB GenCo is committed to acting on these.
- The granting of a site licence will enhance rather than diminish ONR's ability to influence future progress with development of the arrangements. The arrangements are judged to be adequate for this stage of the project and will provide a sound platform for development as the project proceeds.
- To conclude, I am broadly satisfied that NNB GenCo's compliance arrangements for providing suitable training for staff who have responsibility for any operations which may affect safety under Licence Condition 10 are addressing the expectations of relevant standards. The arrangements and their implementation are still evolving but outstanding issues have been recognised by NNB GenCo and there is a strong forward momentum within the company to carry this development forward. This gives me confidence that the arrangements are sufficiently far advanced for this stage of the project.

5.2 Recommendations

- My recommendations are as follows.
 - NNB GenCo's training arrangements for compliance with Licence Condition 10 and the implementation of these arrangements should be considered adequate to support a decision by ONR to grant a nuclear site licence for Hinkley Point C.
 - ONR should continue to monitor and influence the continued development of NNB GenCo's arrangements.

6 REFERENCES

- 1 ONR How2 Business Management System. Permissioning Reports. AST/003 Issue 5. HSE. July 2010. www.hse.gov.uk/nuclear/operational/assessment/index.htm.
- 2 Safety Assessment Principles for Nuclear Facilities. 2006 Edition Revision 1. HSE. January 2008. www.hse.gov.uk/nuclear/SAP/SAP2006.pdf.
- 3 T/AST/027 Training and Assuring Personnel Competence http://www.hse.gov.uk/nuclear/operational/tech_asst_guides/operational/tech_asst_guides/index.htm
- 4 IAEA Safety Standard. The Management System for Facilities and Activities Safety Requirements GS-R-3, July 2006. International Atomic Energy Agency (IAEA)
- 5 IAEA Technical Report Series 380 Nuclear Power Plant Personnel Training and its Evaluation: A Guidebook. International Atomic Energy Agency (IAEA)
- 6 NNB GenCo Ltd's Application for a Nuclear Site Licence to Install and Operate two EPR Units at Hinkley Point, ONR Intervention Strategy. TRIM 2012/61973.
- 7 CNRP Intervention Project Record. NNB-HPC1-IPR05. Verification of Training Arrangements. November 2011. TRIM 2011/577441.
- 8 Application for a Nuclear Site Licence for Hinkley Point. ONR-HPC-20143R. NNB GenCo. July 2011. TRIM 2011/503357.
- 9 NNB GenCo Nuclear Site Licence Application Dossier. NNB GenCo. July 2011. TRIM 2011/442090.
- 10 Intervention Report IR 12123. Verification of Competence Arrangements 15 18, 28 May 2012. TRIM 2012/263681.

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Table 1

Relevant Safety Assessment Principles Considered During the Assessment

SAP No.	SAP Title	Description
EHF.8	·	This makes reference to an organisation needing a process for identifying and delivering competence; identification of competence requirements; training needs analysis; training programme design and implementation; formal assessment of competence and evaluation.

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Annex 1
Working level meetings and interventions to discuss LC10 compliance arrangements

Date	Location	Торіс	TRIM Ref.
26/04/10	Bootle	L4 Training and Competence (CR 10068)	2010/341435
30/07/10	Bootle	L4 Training and Competence (CR 10063)	2010/338006
02/12/10	London	L4 Training and Competence (CR 10164)	2010/18110
27/01/11	Cheltenham	L4 Training and Competence (CR 11018)	2011/72286
03/03/11	Gloucester	L4 Training and Competence (CR 11049)	2011/295462
08/11/11	Barnwood	L4 Training and Competence (IR 11214)	2011/110846
23/02/12	Barnwood	L4 Training and Competence (IR 12017)	2012/124606
15-28/05/12	London Barnwood HPC	Verification of Competence Arrangements Intervention (IR 12138)	2012/263681
22/06/12	London	L4 Training and Competence (IR 12127)	2012/282141

Annex 2 Documents considered

Title	Document Number	TRIM Reference
NNB GenCo Training Policy Statement	NNB-OSL-POL-000007	
UK EPR Training Strategy	NSL/B/TECH/09/163	
Management of Training procedure	NNB-OSL-STA-000009	
NNB GenCo Nuclear Baseline	NNB-HRE-ASS-000001	
Determine Training Needs procedure	NNB-OSL-PRO-000084	
Design Training procedure	NNB-OSL-PRO-000085	
Develop Training procedure	NNB-OSL-PRO-000086	
Implement Training procedure	NNB-OSL-PRO-000087	
Evaluate Training procedure	NNB-OSL-PRO-000088	
Training Plan to FIDD		2011/605487
NNB GenCo Organisation Chart 13 July 2012		2012/282590
Independent Assessment - NNB GenCo Training and Qualification	NNB-OSL-REP-000264	
Self-Assessment – Training and Qualification Initial Self Assessment	L3BHPCNSLASA01160	
Control and Instrumentation (C&I) Workstream Assessment to Inform Nuclear site Licensing of NNB GenCo Hinkley Point C	ONR-CNRP-AR-12-092	
Hinkley Point C Nuclear Site Licensing – Mechanical Engineering Topic Report	ONR-CNRP-AR-12-075	
Electrical Engineering Assessment NNB GenCo Hinkley Point C Licensing	ONR-CNRP-AR-12-085	
Hinkley Point C Nuclear Site Licensing – Structural Integrity Topic Report	ONR-CNRP-AR-12-065	
Civil Engineering Workstream – Nuclear Site Licensing of Hinkley Point C	ONR-CNRP-AR-12-088	
Probabilistic Safety Analysis (PSA) Workstream Assessment to Inform Nuclear Site Licensing of Hinkley Point C	ONR-CNRP-AR-12-056	
External Hazards Assessment to Inform Nuclear site Licensing of Hinkley Point C	ONR-CNRP-AR-12-107	
Internal Hazards Workstream Assessment to Inform the Nuclear Site Licensing of Two EPR	ONR-CNRP-AR-12-082	

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Title	Document Number	TRIM Reference
Reactor Units at Hinkley Point C		
NNB GenCo - Hinkley Point C Licence Condition 14 Report for Licensing	ONR-CNRP-AR-12-083	
Hinkley Point C Human Factors Assessment	ONR-CNRP-AR-12-086	