

|   |          |                          |
|---|----------|--------------------------|
| NUCLEAR SAFETY DIRECTORATE - BUSINESS MANAGEMENT SYSTEM       |          |                          |
| <b>BUSINESS SUPPORT</b>                                       |          | <b>BSS/HRM/024</b>       |
| <b>Guiding the Personal Development of Nuclear Inspectors</b> |          | ISSUE 001                |
| Approved By: <i>D Porter</i>                                  | D Porter | Issue Date:<br>21/08/02  |
| Open Government Status: Fully Open                            |          | Review Date:<br>20/08/05 |

## 1. Purpose & Scope

1.1 This procedure provides instructions for nuclear inspector line managers on the development of Band 2 and Band 3 inspectors in line with business needs. This procedure complements the HSE T&D strategy and the corporate procedures for personal development.

## 2. Policy

2.1 NSD's Policy on the personal development of nuclear inspectors is to:

- 1) provide continuing professional development, (CPD) in discipline specialist areas and regulatory skills;
- 2) provide a worthwhile, challenging and varied career balancing personal preference with business need and maximising the potential of staff, for mutual benefit;
- 3) maintain a adequate cadre of nuclear inspectors with appropriate up to date expertise and a broad base of experience of nuclear technical and regulatory activity.

## 3. Responsibilities

3.1 **Heads of Division**, in the management of their Divisions take account of the need to cater for the development activities required to implement these procedures.

3.2 **Line managers** as part of development reviews, are responsible for guiding the development of inspectors in CPD, personal development and career moves to meet business needs along the lines set out in this procedure. As part of work planning they are also responsible with Heads of Division and other line managers for

arranging the necessary development activities required to implement these procedures.

**3.3 Nuclear Topic Leads, (NTLs)** provide line managers with advice on CPD, personal development and career moves for their topic group members, taking account of this procedure.

**3.4 The Senior Management Group (SMG)** in their role as the CDRG take account of the competence matrix and development model set out in this procedure.

**3.5 Job holders** as part of their responsibilities for their own development take account of this procedure.

## **4. Definitions**

**4.1 Development Reviews.** = The yearly and half yearly development reviews conducted as part of HSE procedures

**4.2 Regulators NVQ** = Health and Safety Regulator Standard (level 5)

## **5. Procedure**

**5.1** As part of year and half year development reviews line managers should provide, in collaboration where appropriate with the relevant NTL:

1) **for newly recruited inspectors** guidance and direction on the completion of essential introductory development and training over the first 2 to 3 years, including:

- i) mandatory course
- ii) closely supervised, structured development work based on business needs;
- iii) where appropriate, attendance at the Herriot Watt Diploma Course, or equivalent;
- iv) where appropriate, completion of the whole or relevant parts of the regulators NVQ;

v) structured involvement in the full range of regulatory activity including: assessment; site inspection planning; checking compliance with licence conditions; team inspections; emergency exercises; investigations; issuing licence instruments.

2) **for all inspectors** guidance and direction on **CPD**, including where appropriate, the completion of the whole or relevant parts of the NVQ where desired and agreed as necessary for business need;

3) **for all inspectors** guidance and direction on **development activities** based on an assessments of abilities **against the competence matrix** for the relevant Band and job set out in **Appendix 1**, ( the staffing project competences); and

4) **for all inspectors** when appropriate, guidance and direction on **career moves** in line with the development model set out in **Appendix 2** to this procedure.

## 6. Associated Documents

6.1 *HSE Training and Development Strategy*

6.2 *HSE's Your Performance Matters.*

6.3 *BSS/HRM/002 - Career Development Review Process*

6.4 *BMM Annex 6 - Nuclear Topic Leads and Groups*

## Appendix 1

### Staffing Project Competences.

### Skills and Attributes of the Functional Competence Areas

In this appendix the following expressions have the following meanings:

1. **"Technical/Expert knowledge within a relevant field"**

This is the professional background, and underpinning knowledge and competence acquired through achieving a professional [engineering or scientific] qualification eg by academic study, exceptionally a vocational route, typified by membership of a professional body etc; plus some experience of applying it in a practical application.

This expertise could be anything from someone being a qualified Civil Engineer to an expert in Management, Human Factors or Fault Studies. It does not relate to any necessary "nuclear specific" expertise. A University academic, a colleague from HSL or a consultant would be expected to have this.

A relevant field simply means that the "narrow" professional and or academic knowledge could be of use and relevance to NSD's core business activities.

## **2. "Application of Technical/Expert knowledge to the Nuclear Industry Sector"**

This takes the knowledge a step further and requires someone to have spent a substantial time (some years) becoming experienced in using their professional (Technical/Expert) knowledge to address nuclear industry problems. For example this differentiates between: - the Civil Engineer who has an expertise in the properties of concrete and one who had designed/assessed a Prestressed Concrete Pressure Vessel (PCPV).

In essence someone who has done 'it' in a Nuclear Industry application.

## **3. Application of knowledge of Nuclear Industry operations, safety case practices and principles".**

This is less to do with professional knowledge and more to do with more general knowledge of the nuclear industry; How it works, what are the principles and philosophies that safe operation is based on in the industry. We would expect this to include things like the practice and principles of Nuclear Safety Committees, how modifications are conceived and managed, what hazards and consequences are involved, what linkages there are between each part of the industry etc.

A key part of this is having the background to take a wide view of the interactions (and reactions) within the industry that can have an effect on safety, regardless of it being technical, political, economic,

management or societal.

Someone who has experience of applying this knowledge to a range of [complex] nuclear safety case issues and has the experience and ability to successfully identify the safety case based compliance issues which are of significance.

This would also require a breadth of experience gained from operating from several perspectives and with a variety of experiences in this field, probably covering several technical areas.

The knowledge in essence provides credibility and hence the ability to influence key players and stakeholders - including the public, politicians and other regulators (eg EA). Amongst other things this credibility is needed to ensure that nuclear safety is not reduced in priority relative to other issues as a result of operator's need to address issues being pressed by licensees other stakeholders such as shareholders or by technically expert inspectors from other regulatory bodies such as the Environment Agency or advisory bodies such as NRPB.

#### **4. "General Legal and Regulatory Knowledge"**

This is the knowledge and application of health and safety regulations and the practice of applying them - The regulators NVQ is one route to this and we would expect most people entering HSE as an inspector to acquire this within a relatively short time. It is the basic application of general HSWA requirements.

#### **5. "Regulation Under a Nuclear Site Licence - Including Permissioning"**

This is knowledge and experience of the wide spectrum of regulation that NSD carry out under NIA powers. Focused on the permissioning regime we operate principally through conditions attached to the nuclear the site licence. This includes knowledge and experience of the philosophy and practice involved in the application of the site licence, the arrangements required by licence conditions, the supporting safety cases and the general requirements and arrangements to ensure safe operation of nuclear plant by its operator.

This implies actual experience in NII and has been one of those fundamental "skills/attributes" or "competencies" that we have required for promotion into the Band 2 nuclear inspector grade. Some skill and knowledge in this area may be acquired by people who are intimately

subject to our licensing requirements, but would probably be limited to discrete areas (eg regulation of a large project through licence instruments and consent/approvals).

**A five level scale of 1 - 5 is used to define the level of skill/attribute needed in each role. These have meanings:**

1. Very limited skill/attribute needed.
2. Basic understanding - limited application (not practitioner level).
3. Adequately conversant - limited application - the minimum practioner level (can be represented by sufficient breadth as well as depth)
4. Conversant - applies competence within existing NII guidance.
5. Fully conversant and competent in (selectively) applying the skill/attribute and exercising full discretion/ judgement to the maximum level needed by NII.

Higher levels could be identified and defined but are not used here. The higher levels are often used by staff to deliver other Directorate needs i.e. in international fora, establishing Directorate strategy etc. and to more effectively and efficiently deliver the basic functions.

**Role 1**

**ASSESSMENT INSPECTOR ROLE IN NSD -  
MINIMUM COMPETENCE SET FOR ENTRY**

|                               | <b>Technical/<br/>Expert<br/>Knowledge<br/>Within a<br/>Relevant<br/>Field</b> | <b>Application<br/>of<br/>Technical/<br/>Expert<br/>Knowledge<br/>to Nuclear<br/>Industry<br/>Sector</b> | <b>Application<br/>of<br/>Knowledge<br/>of Nuclear<br/>Industry<br/>Operations,<br/>Practices<br/>and<br/>Principles</b> | <b>General<br/>Legal and<br/>Regulatory<br/>Knowledge</b> | <b>Regulation<br/>Under a<br/>Nuclear Site<br/>Licence -<br/>Including<br/>Permissioning</b> |
|-------------------------------|--|--|--|---|--|
| <b>INSPECTION FUNCTION</b>    |  |  |  |   |  |
| Influence the Inspection Plan | 1  | 1  | 1  | 1   | 1  |

|  |     |     |     |     |     |
|--|-----|-----|-----|-----|-----|
| Plan Specialist Inspections  | 2   | 2   | 2   | 1   | 1   |
| Gather Information   | 4   | 3   | 3   | 1   | 1   |
| Evaluate Information   | 4   | 3   | 3   | 1   | 1   |
| Investigate Incidents  | 3   | 2   | 2   | 1   | 2   |
| Make Recommendations for Enforcement Action  | 4   | 3   | 3   | 1   | 1   |
| <b><u>PERMISSIONING FUNCTION</u></b>   |     |     |     |     |     |
| Produce PAR and Justify Recommendation   | 3   | 3   | 3   | 1   | 2   |
| Produce Licence Instrument   | 1   | 1   | 1   | 1   | 2   |
| Exercise Discretion  | 3   | 3   | 3   | 2   | 2   |
| <b><u>ENFORCEMENT FUNCTION</u></b>   |     |     |     |     |     |
| Provide Expert Evidence  | N/A | N/A | N/A | N/A | N/A |
| Collect Evidence   | 3   | 3   | 3   | 2   | 2   |
| Analysis and Evaluation of Evidence  | 4   | 3   | 3   | 2   | 2   |
| Provide Advice and Influence Improvement   | 4   | 3   | 3   | 1   | 1   |
| <b><u>TECHNICAL ASSESSMENT FUNCTION</u></b>  |     |     |     |     |     |
| Setting Scope and Depth of Assessment (Prioritization)                                   | N/A | N/A | N/A | N/A | N/A |
| Identify Need for a Safety Case  | N/A | N/A | N/A | N/A | N/A |
| Influencing the Development of a Safety Case   | 4   | 3   | 3   | 1   | 1   |
| Grasping Basis and Context of Safety Case  | 4   | 3   | 3   | 1   | 1   |
| Making Decisions on Sampling (Validity of Methodology, Data, Assumptions and Provenance) | 4   | 3   | 2   | N/A | N/A |
| Managing Assessment (Self, Colleagues and Contractors)                                   | 3   | 3   | 2   | 1   | 1   |

|  |     |     |     |     |     |
|--|-----|-----|-----|-----|-----|
| Gather Data (Reading, Clarifying, Inspecting) for In-Depth Assessment                              | 4   | 3   | 3   | 1   | 1   |
| Judging Adequacy and Identifying Issues (Evaluation)   | 4   | 3   | 3   | 1   | 1   |
| Negotiating and Influencing to Resolve Issues  | 4   | 3   | 3   | 1   | 1   |
| Making and Justifying Decisions and Recommendations (Including Enforcement Action)                 | 4   | 3   | 3   | 1   | 1   |
| Judging Quality of Safety Case (ALSCAP)  | 3   | 3   | 3   | N/A | 1   |
| Identify Relevant and Significant Gaps in Knowledge and Data                                       | 4   | 3   | 2   | 1   | 1   |
| Judging Safety Management Procedures and Arrangements for Production and Assessment of Safety Case | 3   | 3   | 3   | 1   | 1   |
| Provide Briefing   | 4   | 3   | 3   | 2   | 2   |
| <b><u>PROJECT INSPECTION FUNCTION</u></b>  |     |     |     |     |     |
| Manage the Assessment Process  | 1   | 1   | 1   | 1   | 1   |
| Analysis and Interpretation of Outputs   | 2   | 2   | 2   | 1   | 1   |
| Facilitate Expert Interaction  | 1   | 1   | 2   | 1   | 1   |
| <b><u>STANDARDS AND ADVICE FUNCTION</u></b>  |     |     |     |     |     |
| Developing and Maintaining Internal Guidance   | N/A | N/A | N/A | N/A | N/A |
| Developing and Promulgating External Guidance  | N/A | N/A | N/A | N/A | N/A |
| Contributing To and Influencing National and International Guidance and Standards (Nuclear)        | 5   | 5   | 3   | 2   | 3   |

|  |     |     |     |     |     |
|--|-----|-----|-----|-----|-----|
| Influencing and Contributing to Advisory Material to HSC, to Government, (eg. NUSAC, OGD, Briefings via SPD, PQs, TO etc.) | 3   | 3   | 3   | 1   | 2   |
| <b>LICENSING FUNCTION</b>  |     |     | N/A |     |     |
| <b>RESEARCH FUNCTION</b>   |     |     |     |     |     |
| Identifying and Developing Nuclear Research Issues   | 4   | 3   | 3   | 1   | 1   |
| Procuring and Managing Levy Research   | 3   | 3   | 2   | 1   | 1   |
| Influencing the IMC to Address the Issues  | 4   | 3   | 3   | 1   | 1   |
| <b>BUSINESS SUPPORT FUNCTION</b>   |     |     |     |     |     |
| Continuous Improvement   | 1   | 1   | 1   | 1   | 1   |
| General Admin  | 1   | 1   | 1   | 1   | 1   |
| <b>STRATEGY FUNCTION</b>   |     |     |     |     |     |
| Advise Adequacy of National and International Emergency Preparedness   | 4   | 3   | 3   | 1   | 1   |
| Acting as Advisors to GTA and Ministers  | N/A | N/A | N/A | N/A | N/A |

Role 2

### ASSESSMENT INSPECTOR ROLE IN NSD - FULLY EFFECTIVE INSPECTOR

|                               | Technical/ Expert Knowledge Within a Relevant Field | Application of Technical/ Expert Knowledge to Nuclear Industry Sector | Application of Knowledge of Nuclear Industry Operations, Practices and Principles | General Legal and Regulatory Knowledge | Regulation Under a Nuclear Site Licence - Including Permissioning |
|-------------------------------|---|---|---|--|---|
| <b>INSPECTION FUNCTION</b>    |   |   |   |  |   |
| Influence the Inspection Plan | 1   | 1   | 2   | 2                                      | 2   |
| Plan Specialist Inspections   | 2   | 2   | 2   | 2                                      | 2   |

|  |   |   |   |     |     |
|--|---|---|---|-----|-----|
| Gather Information   | 5 | 4 | 4 | 2   | 3   |
| Evaluate Information   | 5 | 4 | 4 | 2   | 3   |
| Investigate Incidents  | 3 | 2 | 2 | 1   | 2   |
| Make Recommendations for Enforcement Action  | 5 | 4 | 4 | 2   | 3   |
| <b><u>PERMISSIONING FUNCTION</u></b>   |   |   |   |     |     |
| Produce PAR and Justify Recommendation   | 3 | 3 | 3 | 1   | 3   |
| Produce Licence Instrument   | 1 | 1 | 1 | 1   | 3   |
| Exercise Discretion  | 3 | 3 | 3 | 2   | 3   |
| <b><u>ENFORCEMENT FUNCTION</u></b>   |   |   |   |     |     |
| Provide Expert Evidence  | 5 | 5 | 5 | 3   | 3   |
| Collect Evidence   | 3 | 3 | 4 | 4   | 4   |
| Analysis and Evaluation of Evidence  | 5 | 4 | 4 | 4   | 4   |
| Provide Advice and Influence Improvement   | 5 | 4 | 4 | 2   | 4   |
| <b><u>TECHNICAL ASSESSMENT FUNCTION</u></b>  |   |   |   |     |     |
| Setting Scope and Depth of Assessment (Prioritization)                                   | 5 | 4 | 4 | 1   | 3   |
| Identify Need for a Safety Case  | 5 | 4 | 4 | 2   | 3   |
| Influencing the Development of a Safety Case   | 5 | 4 | 4 | 2   | 3   |
| Grasping Basis and Context of Safety Case  | 5 | 4 | 4 | 2   | 3   |
| Making Decisions on Sampling (Validity of Methodology, Data, Assumptions and Provenance) | 5 | 3 | 2 | N/A | N/A |
| Managing Assessment (Self, Colleagues and Contractors)                                   | 3 | 3 | 2 | 1   | 1   |
| Gather Data (Reading, Clarifying, Inspecting) for In-Depth Assessment                    | 5 | 4 | 4 | 2   | 3   |

|  |   |   |   |     |   |
|--|---|---|---|-----|---|
| Judging Adequacy and Identifying Issues (Evaluation)   | 5 | 4 | 4 | 2   | 3 |
| Negotiating and Influencing to Resolve Issues  | 5 | 4 | 4 | 2   | 3 |
| Making and Justifying Decisions and Recommendations (Including Enforcement Action)                 | 5 | 4 | 4 | 2   | 3 |
| Judging Quality of Safety Case (ALSCAP)  | 3 | 3 | 4 | N/A | 3 |
| Identify Relevant and Significant Gaps in Knowledge and Data                                       | 5 | 4 | 2 | 1   | 1 |
| Judging Safety Management Procedures and Arrangements for Production and Assessment of Safety Case | 3 | 3 | 4 | 1   | 3 |
| Provide Briefing   | 5 | 4 | 4 | 2   | 3 |
| <b><u>PROJECT INSPECTION FUNCTION</u></b>  |   |   |   |     |   |
| Manage the Assessment Process  | 1 | 1 | 1 | 1   | 2 |
| Analysis and Interpretation of Outputs   | 2 | 2 | 3 | 2   | 2 |
| Facilitate Expert Interaction  | 2 | 1 | 2 | 1   | 1 |
| <b><u>STANDARDS AND ADVICE FUNCTION</u></b>  |   |   |   |     |   |
| Developing and Maintaining Internal Guidance   | 5 | 5 | 3 | 1   | 3 |
| Developing and Promulgating External Guidance  | 5 | 5 | 3 | 1   | 3 |
| Contributing To and Influencing National and International Guidance and Standards (Nuclear)        | 5 | 5 | 3 | 2   | 3 |

|  |   |   |     |   |   |
|--|---|---|-----|---|---|
| Influencing and Contributing to Advisory Material to HSC, to Government, (eg. NUSAC, OGD, Briefings via SPD, PQs, TO etc.) | 4 | 4 | 3   | 1 | 2 |
| <b>LICENSING FUNCTION</b>  |   |   | N/A |   |   |
| <b>RESEARCH FUNCTION</b>   |   |   |     |   |   |
| Identifying and Developing Nuclear Research Issues   | 5 | 4 | 4   | 1 | 1 |
| Procuring and Managing Levy Research   | 3 | 3 | 2   | 1 | 1 |
| Influencing the Management IMC to Address the Issues (TW6)   | 5 | 4 | 4   | 1 | 1 |
| <b>BUSINESS SUPPORT FUNCTION</b>   |   |   |     |   |   |
| Continuous Improvement   | 1 | 1 | 1   | 1 | 1 |
| General Admin  | 1 | 1 | 1   | 1 | 1 |
| <b>STRATEGY FUNCTION</b>   |   |   |     |   |   |
| Advise Adequacy of National and International Emergency Preparedness   | 5 | 4 | 4   | 1 | 1 |
| Acting as Advisors to GTA and Ministers  | 5 | 5 | 5   | 3 | 3 |

Role 3

### ASSESSMENT INSPECTOR ROLE IN NSD - FULLY EFFECTIVE PRINCIPAL INSPECTOR

|                               | Technical/ Expert Knowledge Within a Relevant Field | Application of Technical/ Expert Knowledge to Nuclear Industry Sector | Application of Knowledge of Nuclear Industry Operations, Practices and Principles | General Legal and Regulatory Knowledge | Regulation Under a Nuclear Site Licence - Including Permissioning |
|-------------------------------|---|---|---|--|---|
| <b>INSPECTION FUNCTION</b>    |   |   |   |  |   |
| Influence the Inspection Plan | 1   | 1   | 2   | 3                                      | 3   |

|  |   |   |   |     |     |
|--|---|---|---|-----|-----|
| Plan Specialist Inspections  | 2 | 2 | 2 | 2   | 3   |
| Gather Information   | 5 | 5 | 5 | 2   | 4   |
| Evaluate Information   | 5 | 5 | 5 | 2   | 4   |
| Investigate Incidents  | 3 | 2 | 2 | 1   | 2   |
| Make Recommendations for Enforcement Action  | 5 | 5 | 5 | 3   | 4   |
| <b><u>PERMISSIONING FUNCTION</u></b>   |   |   |   |     |     |
| Produce PAR and Justify Recommendation   | 3 | 3 | 3 | 1   | 4   |
| Produce Licence Instrument   | 1 | 1 | 1 | 1   | 4   |
| Exercise Discretion  | 4 | 4 | 4 | 2   | 4   |
| <b><u>ENFORCEMENT FUNCTION</u></b>   |   |   |   |     |     |
| Provide Expert Evidence  | 5 | 5 | 5 | 3   | 3   |
| Collect Evidence   | 3 | 3 | 4 | 4   | 4   |
| Analysis and Evaluation of Evidence  | 5 | 5 | 5 | 4   | 4   |
| Provide Advice and Influence Improvement   | 5 | 5 | 5 | 2   | 4   |
| <b><u>TECHNICAL ASSESSMENT FUNCTION</u></b>  |   |   |   |     |     |
| Setting Scope and Depth of Assessment (Prioritization)                                   | 5 | 5 | 5 | 1   | 4   |
| Identify Need for a Safety Case  | 5 | 5 | 5 | 2   | 4   |
| Influencing the Development of a Safety Case   | 5 | 5 | 5 | 2   | 4   |
| Grasping Basis and Context of Safety Case  | 5 | 5 | 5 | 2   | 4   |
| Making Decisions on Sampling (Validity of Methodology, Data, Assumptions and Provenance) | 5 | 3 | 2 | N/A | N/A |
| Managing Assessment (Self, Colleagues and Contractors)                                   | 3 | 3 | 2 | 1   | 1   |

|  |   |   |   |     |   |
|--|---|---|---|-----|---|
| Gather Data (Reading, Clarifying, Inspecting) for In-Depth Assessment                              | 5 | 5 | 5 | 2   | 4 |
| Judging Adequacy and Identifying Issues (Evaluation)   | 5 | 5 | 5 | 2   | 4 |
| Negotiating and Influencing to Resolve Issues  | 5 | 5 | 5 | 2   | 4 |
| Making and Justifying Decisions and Recommendations (Including Enforcement Action)                 | 5 | 5 | 5 | 3   | 4 |
| Judging Quality of Safety Case (ALSCAP)  | 3 | 3 | 5 | N/A | 4 |
| Identify Relevant and Significant Gaps in Knowledge and Data                                       | 5 | 5 | 2 | 1   | 1 |
| Judging Safety Management Procedures and Arrangements for Production and Assessment of Safety Case | 3 | 3 | 5 | 1   | 4 |
| Provide Briefing   | 5 | 5 | 4 | 2   | 4 |
| <b><u>PROJECT INSPECTION FUNCTION</u></b>  |   |   |   |     |   |
| Manage the Assessment Process  | 1 | 1 | 1 | 1   | 2 |
| Analysis and Interpretation of Outputs   | 2 | 2 | 3 | 2   | 2 |
| Facilitate Expert Interaction  | 2 | 1 | 2 | 1   | 1 |
| <b><u>STANDARDS AND ADVICE FUNCTION</u></b>  |   |   |   |     |   |
| Developing and Maintaining Internal Guidance   | 5 | 5 | 3 | 1   | 3 |
| Developing and Promulgating External Guidance  | 5 | 5 | 3 | 1   | 3 |
| Contributing To and Influencing National and International Guidance and Standards                  | 5 | 5 | 3 | 2   | 3 |

|  |   |   |     |   |   |
|--|---|---|-----|---|---|
| Influencing and Contributing to Advisory Material to HSC, to Government, (eg. NUSAC, OGD, Briefings via SPD, PQs, TO etc.) | 4 | 4 | 3   | 1 | 2 |
| <b>LICENSING FUNCTION</b>  |   |   | N/A |   |   |
| <b>RESEARCH FUNCTION</b>   |   |   |     |   |   |
| Identifying and Developing Nuclear Research Issues   | 5 | 5 | 5   | 1 | 1 |
| Procuring and Managing Levy Research   | 3 | 3 | 2   | 1 | 1 |
| Influencing the IMC to Address the Issues (TWG)  | 5 | 5 | 5   | 1 | 1 |
| <b>BUSINESS SUPPORT FUNCTION</b>   |   |   |     |   |   |
| Continuous Improvement   | 1 | 1 | 1   | 1 | 1 |
| General Admin  | 1 | 1 | 1   | 1 | 1 |
| <b>STRATEGY FUNCTION</b>   |   |   |     |   |   |
| Advise Adequacy of National and International Emergency Preparedness   | 5 | 5 | 5   | 1 | 1 |
| Acting as Advisors to GTA and Ministers  | 5 | 5 | 5   | 3 | 3 |

#### Role 4

### SITE INSPECTOR ROLE IN NSD - MINIMUM COMPETENCE SET FOR ENTRY

|                                    | Technical/ Expert Knowledge within a relevant field | Application of Technical/ Expert Knowledge to Nuclear Industry Sector | Application of knowledge of Nuclear Industry operations, practices and principles | General Legal and Regulatory Knowledge | Nuclear Permissioning i.e. Regulation under a nuclear site licence |
|------------------------------------|---|---|---|--|--|
| <b>INSPECTION FUNCTION</b>         |   |   |   |  |  |
| Establish Inspection Plan for Site | N/A   | N/A   | N/A   | N/A                                    | N/A  |

|  |   |   |   |   |   |
|--|---|---|---|---|---|
| Inspect against Plan                         | 2 | 2 | 3 | 3 | 3 |
| Manage Inspection Plan                       | 2 | 2 | 1 | 3 | 3 |
| Gather Information                           | 2 | 2 | 3 | 3 | 3 |
| Evaluate Information                         | 2 | 2 | 4 | 3 | 3 |
| Prioritise Response                          | 2 | 2 | 4 | 3 | 3 |
| Investigate Events                           | 2 | 2 | 3 | 3 | 3 |
| Provide Briefing on site related activities  | 1 | 1 | 3 | 3 | 3 |
| Generate required paperwork                  | 2 | 2 | 3 | 3 | 3 |
| Liaise with OGDs                             | 2 | 2 | 3 | 3 | 3 |
| Liaise with management/safety reps           | 2 | 2 | 3 | 3 | 3 |
| Achieve Improvement                          | 2 | 2 | 3 | 3 | 3 |
| Emergency Exercises                          | 2 | 2 | 3 | 3 | 3 |
| Review Meetings                              | 2 | 2 | 3 | 3 | 3 |
| Start Up Meetings                            | 2 | 2 | 3 | 3 | 3 |
| Liaison with Public Representatives LLC/LCLC | 2 | 2 | 3 | 3 | 3 |
| <b><u>PERMISSIONING FUNCTION</u></b>         |   |   |   |   |   |
| Production of PAR                            | 2 | 2 | 3 | 3 | 3 |
| Production of LI                             | 1 | 1 | 1 | 1 | 3 |
| Exercise of Discretion                       | 2 | 2 | 3 | 3 | 3 |
| Justification for Recommendation             | 2 | 2 | 3 | 3 | 3 |

|   |   |   |   |     |   |
|---|---|---|---|-----|---|
| <b><u>ENFORCEMENT<br/>FUNCTION</u></b>              |   |   |   |     |   |
| Collection of Evidence                              | 1 | 1 | 3 | 3   | 3 |
| Analysis and Evaluation of Evidence                 | 2 | 2 | 3 | 3   | 3 |
| Exercise of Discretion                              | 2 | 2 | 3 | 3   | 3 |
| Negotiating and Influencing                         | 2 | 2 | 3 | 3   | 3 |
| Formal use of powers                                | 1 | 1 | 3 | 3   | 3 |
| <b><u>TECHNICAL<br/>ASSESSMENT<br/>FUNCTION</u></b> |   |   |   |     |   |
| Initial Scoping                                     | 2 | 2 | 3 | N/A | 2 |
| General Assessment                                  | 3 | 3 | 3 | N/A | 2 |
| Interaction/<br>interdependencies                   | 1 | 1 | 3 | N/A | 2 |
| Fundamental knowledge of Key Technical Issues       | 3 | 3 | 3 | N/A | 1 |
| <b><u>PROJECT<br/>MANAGEMENT<br/>FUNCTION</u></b>   |   |   |   |     |   |
| Manage Process of Safety Case Assessment            | 1 | 1 | 1 | 2   | 2 |
| Intelligent Analysis of Assessment Breadth and Need | 1 | 1 | 3 | 2   | 2 |
| Intelligent Interpretation of Outputs               | 1 | 1 | 3 | 2   | 2 |
| Facilitate Technical Expert Interaction             | 1 | 1 | 3 | 2   | 2 |

|  |     |     |     |     |     |
|--|-----|-----|-----|-----|-----|
| <b><u>STANDARDS AND ADVICE FUNCTION</u></b>                |     |     |     |     |     |
| Knowledge and Application of Minimum Standards             | 2   | 2   | 3   | 3   | 3   |
| Broad knowledge of 'best practice'                         | 2   | 2   | 3   | 3   | 3   |
| <b><u>LICENSING FUNCTION</u></b>                           |     |     |     |     |     |
| Assessment of Viability of Proposal                        | N/A | N/A | N/A | N/A | N/A |
| Preparation of Schedule 3                                  | N/A | N/A | 1   | N/A | 3   |
| Preparation of 'new' Approvals/relevant LIs                | N/A | N/A | 1   | N/A | 3   |
| Verification checks  | N/A | N/A | 3   | N/A | 3   |
| Interpretation of Changes arising from verification checks | 2   | 2   | 3   | N/A | 3   |
| <b><u>RESEARCH FUNCTION</u></b>                            |     |     |     |     |     |
| Identification of Issues                                   | 2   | 2   | 3   | N/A | 2   |
| Interpretation of usefulness of outputs                    | 2   | 2   | 3   | N/A | 2   |
| <b><u>BUSINESS SUPPORT FUNCTION</u></b>                    |     |     |     |     |     |
| General Administration                                     | 1   | 1   | 1   | 1   | 1   |
| <b><u>STRATEGY FUNCTION</u></b>                            |     |     |     |     |     |
| Identification of need                                     | 2   | 2   | 3   | 2   | 2   |

|                              |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|
| Contribute to Working Groups | N/A | N/A | N/A | N/A | N/A |
|------------------------------|-----|-----|-----|-----|-----|

Role 5

**SITE INSPECTOR ROLE IN NSD - FULLY EFFECTIVE INSPECTOR**

|   | Technical/<br>Expert<br>Knowledge<br>within a<br>relevant<br>field | Application<br>of<br>Technical /<br>Expert<br>Knowledge<br>to Nuclear<br>Industry<br>Sector | Application<br>of<br>knowledge<br>of Nuclear<br>Industry<br>operations,<br>practices<br>and<br>principles | General<br>Legal and<br>Regulatory<br>Knowledge | Nuclear<br>Permissioning<br>i.e. Regulation<br>under a<br>nuclear site<br>licence |
|---|--|---|---|---|---|
| <b><u>INSPECTION<br/>FUNCTION</u></b>       |  |   |   |   |   |
| Establish Inspection Plan for Site          | 2  | 2   | 4   | 4   | 4   |
| Inspect against Plan                        | 2  | 2   | 4   | 4   | 4   |
| Manage Inspection Plan                      | 2  | 2   | 2   | 4   | 4   |
| Gather Information                          | 2  | 2   | 4   | 4   | 4   |
| Evaluate Information                        | 2  | 2   | 4   | 4   | 4   |
| Prioritise Response                         | 2  | 2   | 4   | 4   | 4   |
| Investigate Events                          | 2  | 2   | 3   | 4   | 4   |
| Provide Briefing on site related activities | 2  | 2   | 3   | 3   | 3   |
| Generate required paperwork                 | 2  | 2   | 4   | 4   | 4   |
| Liaise with OGDs                            | 2  | 2   | 4   | 4   | 4   |
| Liaise with management/safety reps          | 2  | 2   | 4   | 4   | 4   |

|  |   |   |   |     |   |
|--|---|---|---|-----|---|
| Achieve Improvement                          | 2 | 2 | 4 | 4   | 4 |
| Emergency Exercises                          | 3 | 3 | 4 | 4   | 4 |
| Review Meetings                              | 2 | 2 | 4 | 4   | 4 |
| Start Up Meetings                            | 2 | 2 | 4 | 4   | 4 |
| Liaison with Public Representatives LLC/LCLC | 2 | 2 | 4 | 4   | 4 |
| <b><u>PERMISSIONING FUNCTION</u></b>         |   |   |   |     |   |
| Production of PAR                            | 2 | 2 | 4 | 4   | 4 |
| Production of LI                             | 1 | 1 | 1 | 1   | 4 |
| Exercise of Discretion                       | 2 | 2 | 4 | 4   | 4 |
| Justification for Recommendation             | 2 | 2 | 4 | 4   | 4 |
| <b><u>ENFORCEMENT FUNCTION</u></b>           |   |   |   |     |   |
| Collection of Evidence                       | 1 | 1 | 3 | 4   | 4 |
| Analysis and Evaluation of Evidence          | 2 | 2 | 4 | 4   | 4 |
| Exercise of Discretion                       | 2 | 2 | 4 | 4   | 4 |
| Negotiating and Influencing                  | 2 | 2 | 4 | 4   | 4 |
| Formal use of powers                         | 1 | 1 | 4 | 4   | 4 |
| <b><u>TECHNICAL ASSESSMENT FUNCTION</u></b>  |   |   |   |     |   |
| Initial Scoping                              | 2 | 2 | 4 | N/A | 2 |

|   |     |     |     |     |     |
|---|-----|-----|-----|-----|-----|
| General Assessment                                  | 3   | 3   | 4   | N/A | 2   |
| Interaction/ interdependencies                      | 2   | 2   | 4   | N/A | 2   |
| Fundamental knowledge of Key Technical Issues       | 3   | 3   | 3   | N/A | 1   |
| <b><u>PROJECT MANAGEMENT FUNCTION</u></b>           |     |     |     |     |     |
| Manage Process of Safety Case Assessment            | 1   | 1   | 1   | 2   | 2   |
| Intelligent Analysis of Assessment Breadth and Need | 2   | 2   | 3   | 2   | 3   |
| Intelligent Interpretation of Outputs               | 2   | 2   | 4   | 2   | 4   |
| Facilitate Technical Expert Interaction             | 2   | 2   | 4   | 2   | 4   |
| <b><u>STANDARDS AND ADVICE FUNCTION</u></b>         |     |     |     |     |     |
| Knowledge and Application of Minimum Standards      | 2   | 2   | 4   | 4   | 4   |
| Broad knowledge of 'best practice'                  | 2   | 2   | 4   | 4   | 4   |
| <b><u>LICENSING FUNCTION</u></b>                    |     |     |     |     |     |
| Assessment of Viability of Proposal                 | N/A | N/A | N/A | N/A | N/A |
| Preparation of Schedule 3                           | N/A | N/A | 2   | N/A | 4   |
| Preparation of 'new' Approvals/relevant LIs         | N/A | N/A | 1   | N/A | 4   |

|  |     |     |     |     |     |
|--|-----|-----|-----|-----|-----|
| Verification checks  | N/A | N/A | 4   | N/A | 4   |
| Interpretation of Changes arising from verification checks | 2   | 2   | 4   | N/A | 4   |
| <b><u>RESEARCH FUNCTION</u></b>                            |     |     |     |     |     |
| Identification of Issues                                   | 2   | 2   | 3   | N/A | 2   |
| Interpretation of usefulness of outputs                    | 2   | 2   | 3   | N/A | 3   |
| <b><u>BUSINESS SUPPORT FUNCTION</u></b>                    |     |     |     |     |     |
| General Administration                                     | 1   | 1   | 1   | 1   | 1   |
| <b><u>STRATEGY FUNCTION</u></b>                            |     |     |     |     |     |
| Identification of need                                     | 2   | 2   | 4   | 3   | 3   |
| Contribute to Working Groups                               | N/A | N/A | N/A | N/A | N/A |

## Role 6

### SITE INSPECTOR ROLE IN NSD - FULLY EFFECTIVE PRINCIPAL INSPECTOR

|                                    | Technical/ Expert Knowledge within a relevant field | Application of Technical/ Expert Knowledge to Nuclear Industry Sector | Application of knowledge of Nuclear Industry operations, practices and principles | General Legal and Regulatory Knowledge | Nuclear Permissioning i.e. Regulation under a nuclear site licence |
|------------------------------------|---|---|---|--|--|
| <b><u>INSPECTION FUNCTION</u></b>  |   |   |   |  |  |
| Establish Inspection Plan for Site | 2   | 2   | 4   | 5                                      | 5  |

|  |   |   |   |   |   |
|--|---|---|---|---|---|
| Inspect against Plan                         | 2 | 2 | 5 | 5 | 5 |
| Manage Inspection Plan                       | 2 | 2 | 2 | 5 | 5 |
| Gather Information                           | 2 | 2 | 4 | 4 | 4 |
| Evaluate Information                         | 2 | 2 | 5 | 5 | 5 |
| Prioritise Response                          | 2 | 2 | 5 | 5 | 5 |
| Investigate Events                           | 2 | 2 | 3 | 4 | 4 |
| Provide Briefing on site related activities  | 2 | 2 | 4 | 3 | 3 |
| Generate required paperwork                  | 2 | 2 | 4 | 5 | 5 |
| Liaise with OGDs                             | 2 | 2 | 4 | 5 | 5 |
| Liaise with management/safety reps           | 2 | 2 | 5 | 5 | 5 |
| Achieve Improvement                          | 2 | 2 | 5 | 5 | 5 |
| Emergency Exercises                          | 3 | 3 | 4 | 5 | 5 |
| Review Meetings                              | 2 | 2 | 5 | 5 | 5 |
| Start Up Meetings                            | 2 | 2 | 5 | 5 | 5 |
| Liaison with Public Representatives LLC/LCLC | 2 | 2 | 4 | 5 | 5 |
| <b><u>PERMISSIONING FUNCTION</u></b>         |   |   |   |   |   |
| Production of PAR                            | 2 | 2 | 5 | 5 | 5 |
| Production of LI                             | 1 | 1 | 1 | 1 | 5 |
| Exercise of Discretion                       | 2 | 2 | 5 | 5 | 5 |
| Justification for Recommendation             | 2 | 2 | 5 | 5 | 5 |
| <b><u>ENFORCEMENT FUNCTION</u></b>           |   |   |   |   |   |
| Collection of Evidence                       | 1 | 1 | 3 | 4 | 4 |
| Analysis and Evaluation of Evidence          | 2 | 2 | 4 | 5 | 5 |
| Exercise of Discretion                       | 2 | 2 | 5 | 5 | 5 |
| Negotiating and Influencing                  | 2 | 2 | 5 | 5 | 5 |
| Formal use of powers                         | 1 | 1 | 4 | 4 | 4 |
| <b><u>TECHNICAL ASSESSMENT FUNCTION</u></b>  |   |   |   |   |   |

|  |     |     |     |     |   |
|--|-----|-----|-----|-----|---|
| Initial Scoping  | 2   | 2   | 4   | N/A | 2 |
| General Assessment   | 3   | 3   | 4   | N/A | 2 |
| Interaction/<br>interdependencies                                | 2   | 2   | 4   | N/A | 2 |
| Fundamental knowledge of<br>Key Technical Issues                 | 3   | 3   | 3   | N/A | 1 |
| <b><u>PROJECT<br/>MANAGEMENT<br/>FUNCTION</u></b>                |     |     |     |     |   |
| Manage Process of Safety<br>Case Assessment                      | 1   | 1   | 1   | 2   | 2 |
| Intelligent Analysis of<br>Assessment Breadth and<br>Need        | 2   | 2   | 3   | 2   | 3 |
| Intelligent Interpretation of<br>Outputs                         | 2   | 2   | 4   | 2   | 4 |
| Facilitate Technical Expert<br>Interaction                       | 2   | 2   | 4   | 2   | 4 |
| <b><u>STANDARDS AND<br/>ADVICE FUNCTION</u></b>                  |     |     |     |     |   |
| Knowledge and Application<br>of Minimum Standards                | 2   | 2   | 4   | 4   | 4 |
| Broad knowledge of 'best<br>practice'                            | 2   | 2   | 4   | 5   | 5 |
| <b><u>LICENSING FUNCTION</u></b>                                 |     |     |     |     |   |
| Assessment of Viability of<br>Proposal                           | 2   | 2   | 5   | N/A | 5 |
| Preparation of Schedule 3  | N/A | N/A | 2   | N/A | 5 |
| Preparation of 'new'<br>Approvals/relevant LIs                   | N/A | N/A | N/A | N/A | 4 |
| Verification checks  | N/A | N/A | 4   | N/A | 4 |
| Interpretation of Changes<br>arising from verification<br>checks | 2   | 2   | 4   | N/A | 4 |
| <b><u>RESEARCH FUNCTION</u></b>                                  |     |     |     |     |   |
| Identification of Issues   | 2   | 2   | 3   | N/A | 2 |
| Interpretation of usefulness<br>of outputs                       | 2   | 2   | 3   | N/A | 3 |
| <b><u>BUSINESS SUPPORT<br/>FUNCTION</u></b>                      |     |     |     |     |   |

|                              |   |   |   |   |   |
|------------------------------|---|---|---|---|---|
| General Administration       | 1 | 1 | 1 | 1 | 1 |
| <b>STRATEGY FUNCTION</b>     |   |   |   |   |   |
| Identification of need       | 2 | 2 | 4 | 4 | 4 |
| Contribute to Working Groups | 3 | 3 | 5 | 5 | 5 |

Role 7

## ENTRY LEVEL

### PROJECT INSPECTOR ROLE - MINIMUM COMPETENCE SET

|                                   | Technical/<br>Expert<br>Knowledge<br>Within A<br>Relevant<br>Field | Application<br>of<br>Technical/<br>Expert<br>Knowledge<br>to Nuclear<br>Industry<br>Sector | Application<br>of<br>Knowledge<br>of Nuclear<br>Industry<br>Operations,<br>Practices<br>and<br>Principles | General<br>Legal and<br>Regulatory<br>Knowledge | Regulation<br>Under a<br>Nuclear Site<br>Licence -<br>Including<br>Permissioning |
|-----------------------------------|--|--|---|---|--|
| <b>INSPECTION FUNCTION</b>        |  |  |   |   |  |
| Establish Project Inspection Plan | 2  | 2  | 3   | 2   | 2  |
| Inspect against Plan              | 2  | 2  | 3   | 2   | 2  |
| Manage Plan & Respond to Findings | 3  | 3  | 3   | 3   | 3  |
| Investigate Relevant Events       | 3  | 3  | 3   | 3   | 3  |
| <b>PERMISSIONING FUNCTION</b>     |  |  |   |   |  |
| Produce PAR1                      | 3  | 3  | 3   |   | 2  |
| Produce LIs, C/As etc             | 2  | 2  | 2   |   | 2  |
| Exercise Discretion               | 2  | 2  | 3   |   | 3  |
| Justify Recommendations           | 2  | 2  | 3   |   | 3  |
| <b>ENFORCEMENT FUNCTION</b>       |  |  |   |   |  |
| Collect Evidence                  | 3  | 3  | 3   | 2   | 2  |
| Analyse and Evaluate Evidence     | 3  | 3  | 3   | 2   | 2  |

|  |   |   |   |   |   |
|--|---|---|---|---|---|
| Exercise Discretion                        | 3 | 3 | 3 | 3 | 3 |
| Negotiate & Influence                      | 3 | 3 | 3 | 3 | 3 |
| Use Formal Powers                          |   |   | 3 | 3 | 3 |
| <b>TECHNICAL ASSESSMENT FUNCTION</b>       |   |   |   |   |   |
| Scope Work                                 | 3 | 3 | 3 | 1 | 2 |
| Assess for Safety Significance             | 3 | 3 | 3 | 2 | 2 |
| Determine Dependencies & Interactions      | 3 | 3 | 3 | 1 | 2 |
| Use Knowledge of Key Technical Issues      | 3 | 3 | 3 | 1 | 2 |
| <b>PROJECT MANAGEMENT FUNCTION</b>         |   |   |   |   |   |
| Evaluate and Priorities                    | 3 | 3 | 3 | 2 | 3 |
| Establish Strategic Objectives and Outputs | 3 | 3 | 3 | 2 | 3 |
| Prepare Project Plan (PID)                 | 3 | 3 | 3 | 1 | 2 |
| Analyse (as IC) Assessment & Inspection    | 3 | 3 | 3 | 2 | 2 |
| Breadth & Need                             |   |   |   |   |   |
| Maintain Oversight of Project              | 2 | 2 | 2 | 1 | 1 |
| Identify Key Project Issues                | 3 | 3 | 3 | 2 | 2 |
| Consult & Liaise                           | 3 | 3 | 3 | 2 | 2 |
| Manage Project Information                 | 2 | 2 | 2 | 1 | 1 |
| Monitor & Manage Progress                  | 3 | 3 | 2 | 1 | 1 |
| Interpret (as IC) Advice Received          | 3 | 3 | 3 | 2 | 3 |
| Challenge Advice                           | 3 | 3 | 3 | 2 | 3 |
| Close out Project                          | 3 | 3 | 2 | 1 | 1 |
| Brief on Project Issues                    | 3 | 3 | 3 | 2 | 3 |
| Achieve Necessary Improvements             | 3 | 3 | 3 | 2 | 3 |
| <b>STANDARDS &amp; ADVICE FUNCTION</b>     |   |   |   |   |   |

|                                    |   |   |   |   |   |
|------------------------------------|---|---|---|---|---|
| Know & Recognise Minimum Standards | 3 | 3 | 3 | 2 | 2 |
| Know & Encourage Best Practice     | 3 | 3 | 3 | 2 | 2 |
| <b>LICENSING</b>                   |   |   |   |   |   |
| Identify Licensing Issues          | 2 | 2 | 3 | 2 | 3 |
| <b>RESEARCH FUNCTION</b>           |   |   |   |   |   |
| Evaluate Utility of Outputs        | 2 | 2 | 3 | 2 | 3 |
| <b>STRATEGY FUNCTION</b>           |   |   |   |   |   |
| Identify Need for Involvement      | 3 | 3 | 3 | 2 | 2 |
| Take Account of Strategy Issues    | 3 | 3 | 3 | 2 | 3 |
| Contribute to Working Group        | 3 | 3 | 3 | 2 | 2 |

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Role 8

## ESTABLISHED NI

### PROJECT INSPECTOR ROLE - MINIMUM COMPETENCE SET

|                                      | Technical/<br>Expert<br>Knowledge<br>Within A<br>Relevant<br>Field | Application<br>of<br>Technical/<br>Expert<br>Knowledge<br>to Nuclear<br>Industry<br>Sector | Application<br>of<br>Knowledge<br>of Nuclear<br>Industry<br>Operations,<br>Practices<br>and<br>Principles | General<br>Legal and<br>Regulatory<br>Knowledge | Regulation<br>Under a<br>Nuclear site<br>Licence -<br>including<br>Permissioning |
|--------------------------------------|--|--|---|---|--|
| <b>INSPECTION<br/>FUNCTION</b>       |  |  |   |   |  |
| Establish Project<br>Inspection Plan | 2  | 2  | 4   | 2   | 4  |
| Inspect against Plan                 | 2  | 2  | 3   | 4   | 3  |
| Manage Plan & Respond<br>to Findings | 3  | 3  | 3   | 4   | 4  |
| Investigate Relevant Events          | 3  | 3  | 3   | 4   | 4  |

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| <b>PERMISSIONING<br/>FUNCTION</b>             |   |   |   |   |   |
| Produce PAR                                   | 3 | 3 | 4 |   | 4 |
| Produce LIs, C/As etc                         | 3 | 3 | 3 |   | 4 |
| Exercise Discretion                           | 3 | 3 | 4 |   | 4 |
| Justify Recommendations                       | 3 | 3 | 4 |   | 4 |
| <b>ENFORCEMENT<br/>FUNCTION</b>               |   |   |   |   |   |
| Collect Evidence                              | 3 | 3 | 3 | 3 | 3 |
| Analyse and Evaluate<br>Evidence              | 3 | 3 | 4 | 3 | 3 |
| Exercise Discretion                           | 3 | 3 | 4 | 4 | 4 |
| Negotiate & Influence                         | 3 | 3 | 4 | 4 | 4 |
| Use Formal Powers                             |   |   | 4 | 4 | 4 |
| <b>TECHNICAL<br/>ASSESSMENT<br/>FUNCTION</b>  |   |   |   |   |   |
| Scope Work                                    | 3 | 3 | 4 | 1 | 2 |
| Assess for Safety<br>Significance             | 3 | 3 | 4 | 2 | 2 |
| Determine Dependencies<br>& Interactions      | 3 | 3 | 4 | 1 | 2 |
| Use Knowledge of Key<br>Technical Issues      | 3 | 3 | 4 | 2 | 3 |
| <b>PROJECT<br/>MANAGEMENT<br/>FUNCTION</b>    |   |   |   |   |   |
| Evaluate and Priorities                       | 3 | 3 | 4 | 2 | 4 |
| Establish Strategic<br>Objectives and Outputs | 3 | 3 | 4 | 2 | 4 |
| Prepare Project Plan (PID)                    | 3 | 2 | 3 | 1 | 3 |
| Analyse (as IC)<br>Assessment & Inspection    | 3 | 3 | 4 | 2 | 3 |
| Breadth & Need                                |   |   |   |   |   |

|  |   |   |   |   |   |
|--|---|---|---|---|---|
| Maintain Oversight of Project          | 2 | 2 | 2 | 1 | 1 |
| Identify Key Project Issues            | 3 | 3 | 4 | 2 | 3 |
| Consult & Liaise                       | 3 | 3 | 4 | 2 | 3 |
| Manage Project Information             | 2 | 2 | 2 | 1 | 1 |
| Monitor & Manage Progress              | 3 | 3 | 3 | 1 | 1 |
| Interpret (as IC) Advice Received      | 3 | 3 | 4 | 2 | 4 |
| Challenge Advice                       | 3 | 3 | 4 | 2 | 4 |
| Close out Project                      | 3 | 3 | 2 | 1 | 2 |
| Brief on Project Issues                | 3 | 3 | 4 | 3 | 4 |
| Achieve Necessary Improvements         | 3 | 3 | 4 | 3 | 4 |
| <b>STANDARDS &amp; ADVICE FUNCTION</b> |   |   |   |   |   |
| Know & Recognise Minimum Standards     | 3 | 3 | 4 | 3 | 3 |
| Know & Encourage Best Practice         | 3 | 3 | 4 | 3 | 3 |
| <b>LICENSING</b>                       |   |   |   |   |   |
| Identify Licensing Issues              | 2 | 2 | 4 | 3 | 4 |
| <b>RESEARCH FUNCTION</b>               |   |   |   |   |   |
| Evaluate Utility of Outputs            | 2 | 2 | 3 | 2 | 3 |
| <b>STRATEGY FUNCTION</b>               |   |   |   |   |   |
| Identify Need for Involvement          | 3 | 3 | 3 | 3 | 3 |
| Take Account of Strategy Issues        | 3 | 3 | 4 | 3 | 4 |
| Contribute to Working Group            | 3 | 3 | 3 | 3 | 4 |

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Role 9

ESTABLISHED PI

## PROJECT INSPECTOR ROLE - MINIMUM COMPETENCE SET

|  | Technical/<br>Expert<br>Knowledge<br>Within A<br>Relevant<br>Field | Application<br>of<br>Technical/<br>Expert<br>Knowledge<br>to Nuclear<br>Industry<br>Sector | Application<br>of<br>Knowledge<br>of Nuclear<br>Industry<br>Operations,<br>Practices<br>and<br>Principles | General<br>Legal and<br>Regulatory<br>Knowledge | Regulation<br>Under a<br>Nuclear Site<br>Licence -<br>Including<br>Permissioning |
|--|--|--|---|---|--|
| <b>INSPECTION<br/>FUNCTION</b>               |  |  |   |   |  |
| Establish Project<br>Inspection Plan         | 2  | 2  | 5   | 2   | 5  |
| Inspect against Plan                         | 2  | 2  | 4   | 4   | 4  |
| Manage Plan & Respond<br>to Findings         | 3  | 3  | 4   | 5   | 5  |
| Investigate Relevant Events                  | 3  | 3  | 4   | 4   | 5  |
| <b>PERMISSIONING<br/>FUNCTION</b>            |  |  |   |   |  |
| Produce PAR                                  | 3  | 3  | 5   |   | 5  |
| Produce LIs, C/As etc                        | 2  | 2  | 4   |   | 5  |
| Exercise Discretion                          | 2  | 2  | 5   |   | 5  |
| Justify Recommendations                      | 2  | 2  | 5   |   | 5  |
| <b>ENFORCEMENT<br/>FUNCTION</b>              |  |  |   |   |  |
| Collect Evidence                             | 3  | 3  | 3   | 4   | 4  |
| Analyse and Evaluate<br>Evidence             | 3  | 3  | 5   | 4   | 4  |
| Exercise Discretion                          | 3  | 3  | 5   | 5   | 5  |
| Negotiate & Influence                        | 3  | 3  | 5   | 5   | 5  |
| Use Formal Powers                            |  |  | 5   | 5   | 5  |
| <b>TECHNICAL<br/>ASSESSMENT<br/>FUNCTION</b> |  |  |   |   |  |

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| Scope Work  | 3 | 3 | 5 | 1 | 2 |
| Assess for Safety Significance                            | 3 | 3 | 5 | 2 | 3 |
| Determine Dependencies & Interactions                     | 3 | 3 | 5 | 1 | 2 |
| Use Knowledge of Key Technical Issues                     | 3 | 3 | 5 | 2 | 3 |
| <b>PROJECT MANAGEMENT FUNCTION</b>                        |   |   |   |   |   |
| Evaluate and Prioritise                                   | 3 | 3 | 5 | 3 | 5 |
| Establish Strategic Objectives and Outputs                | 3 | 3 | 5 | 3 | 5 |
| Prepare Project Plan (PID)                                | 3 | 3 | 3 | 1 | 3 |
| Analyse (as IC) Assessment & Inspection<br>Breadth & Need | 3 | 3 | 5 | 3 | 5 |
| Maintain Oversight of Project                             | 2 | 2 | 2 | 2 | 2 |
| Identify Key Project Issues                               | 3 | 3 | 5 | 2 | 5 |
| Consult & Liaise  | 3 | 3 | 5 | 3 | 5 |
| Manage Project Information                                | 2 | 2 | 2 | 2 | 2 |
| Monitor & Manage Progress                                 | 3 | 3 | 3 | 2 | 2 |
| Interpret (as IC) Advice Received                         | 3 | 3 | 5 | 3 | 5 |
| Challenge Advice  | 3 | 3 | 5 | 3 | 5 |
| Close out Project   | 3 | 3 | 3 | 2 | 3 |
| Brief on Project Issues                                   | 3 | 3 | 5 | 3 | 5 |
| Achieve Necessary Improvements                            | 3 | 3 | 5 | 3 | 5 |
| <b>STANDARDS &amp; ADVICE FUNCTION</b>                    |   |   |   |   |   |
| Know & Recognise Minimum Standards                        | 3 | 3 | 5 | 3 | 3 |
| Know & Encourage Best Practice                            | 3 | 3 | 5 | 3 | 4 |
| <b>LICENSING</b>  |   |   |   |   |   |

|                                 |   |   |   |   |   |
|---------------------------------|---|---|---|---|---|
| Identify Licensing Issues       | 2 | 2 | 5 | 3 | 5 |
| <b>RESEARCH FUNCTION</b>        |   |   |   |   |   |
| Evaluate Utility of Outputs     | 2 | 2 | 3 | 2 | 3 |
| <b>STRATEGY FUNCTION</b>        |   |   |   |   |   |
| Identify Need for Involvement   | 3 | 3 | 4 | 4 | 4 |
| Take Account of Strategy Issues | 3 | 3 | 5 | 4 | 5 |
| Contribute to Working Group     | 3 | 3 | 4 | 4 | 5 |

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Role 10

### INSPECTORS ASSISTANTS (BAND 4)

|                                       | Technical/ Expert Knowledge Within a Relevant Field | Application of Technical/ Expert Knowledge to Nuclear Industry Sector | Application of Knowledge of Nuclear Industry Operations, Safety Case Practices and Principles | General Legal and Regulatory Knowledge | Regulation Under a Nuclear Site Licence - Including Permissioning |
|---------------------------------------|---|---|---|--|---|
| <b>INSPECTION FUNCTION</b>            |   |   |   |  |   |
| Analysis of Inspection Findings       |   |   |   |  |   |
| SALP                                  | 1   | 1   | N/A   | 1                                      | 1   |
| General A,B,C's                       | 1   | N/A   | N/A   | N/A                                    | 1   |
| Incident/Event Analysis (Fast 1s etc) | 1   | 1   | N/A(1)  | 1                                      | 1   |
| <b>PERMISSIONING</b>                  |   |   |   |  |   |

|  |     |     |     |     |     |
|--|-----|-----|-----|-----|-----|
| Technical Clerk  |     |     |     |     |     |
| Preparation of files and documents for LI's etc.                   | N/A | N/A | N/A | 1   | 2   |
| <b><u>INSPECTION</u></b>   |     |     |     |     |     |
| Preparation and Briefing for formal meetings                       |     |     |     |     |     |
| Review Meetings  | N/A | N/A | N/A | N/A | N/A |
| Start up Meetings  | N/A | N/A | N/A | N/A | N/A |
| Level 3 Meetings   | N/A | N/A | N/A | N/A | N/A |
| Manage/Progress internal comments and lines                        | 2   | 2   | 2   | N/A | 2   |
| Issues database - progress chasing                                 | 1   | 1   | N/A | N/A | 1   |
| Progress chasing of formal correspondence with licensees           | 1   | 1   | N/A | N/A | 1   |
| <b><u>ENFORCEMENT</u></b>  |     |     |     |     |     |
| Case Papers Management   |     |     |     |     |     |
| Prosecutions files etc. (Project/Admin management)                 | N/A | N/A | N/A | 2   | 2   |
| <b><u>TECHNICAL ASSESSMENT</u></b>                                 |     |     |     |     |     |
| Managing Data  |     |     |     |     |     |
| Papers, reference etc.   | 2   | N/A | N/A | N/A | N/A |
| Process/project management of TAGs (See also standards and advice) | 1   | N/A | N/A | N/A | N/A |

|   |   |     |     |     |           |
|---|---|-----|-----|-----|-----------|
| Analysis of ALSCAP etc.                                     | 1 | N/A | N/A | N/A | N/A       |
| Progress chasing of formal correspondence and issues        | 1 | 1   | N/A | N/A | 1         |
| Information retrieval (at technical level)                  | 2 | 2   | N/A | N/A | N/A       |
| <b><u>PROJECT INSPECTION [MANAGEMENT]</u></b>               |   |     |     |     |           |
| Manage process of Safety Case Assessment **                 | 1 | 1   | 1   | 2   | 2         |
| Progress chasing of projects and issues                     | 2 | 2   | N/A | 2   | 2         |
| Manage Project Information *                                | 2 | 2   | 2   | 1   | 1         |
| Maintain oversight of project *                             | 2 | 2   | 2   | 1   | 1         |
| <b><u>STANDARDS AND ADVICE</u></b>                          |   |     |     |     |           |
| Process/project management/ chasing of TAGs                 | 2 | 1   | N/A | N/A | 1         |
| <b><u>LICENSING FUNCTION</u></b>                            |   |     |     |     |           |
| [Confirm tasks of present Band 5 post with John Teasdale    | ? | N/A | N/A | 1   | (1) (2) ? |
| <b><u>RESEARCH FUNCTION</u></b>                             |   |     |     |     |           |
| [See Gerry Adderley for task list of present Band 3/4 post] | 2 | 2   | N/A | N/A | N/A       |
| <b><u>BUSINESS SUPPORT FUNCTION</u></b>                     |   |     |     |     |           |

|  |   |     |     |         |     |
|--|---|-----|-----|---------|-----|
| Technical Authors<br>(of Process and Guidance)                             |   |     |     |         |     |
| Process Management [See Mike Readitt for task list of present Band 4 post] | 2 | N/A | N/A | N/A (1) | 1   |
| RMU and Training (Band 4 etc currently in use)                             | 1 | N/A | N/A | ?       | ?   |
| Divisional Planning and Progress   | 1 | N/A | N/A | N/A     | N/A |
| <b><u>STRATEGY</u></b><br><b><u>FUNCTION</u></b>                           |   |     |     |         |     |
| [Consult with Division 4]  | 1 | N/A | N/A | 1       | 1   |

## Appendix 2

### Development 'Model' for Career Moves by Inspectors in NSD.

This model, (summarised in the diagram at the end of this appendix), outlines the development moves open to inspectors. It sets out simplified 'typical' development routes which form the basis of a varied and challenging career in NSD consistent with the business need of maintaining an adequate cadre of nuclear inspectors with appropriate up to date technical and regulatory expertise and a broad base of experience. It should be used as a guide to judging the 'richness' of an inspector's experience **and should prompt consideration of moves** by a line manager where this is not initiated by an inspector.

### Assessment

New starters are usually posted to an assessment Unit where essential introductory development and training should be completed within the first 3 years. Inspectors may return to assessment from other work. It is important that inspectors are given the opportunity to gain a broad range of experience in the application of their discipline and skills. However, there is no hard and fast rule for how this should be achieved and it is for line managers to discuss and agree appropriate times on particular activities which best suit the individual inspector and NSD's requirements. The following time scales are only indicative.

## Expected time in Assessment Posts

- usually no more than 6 consecutive years in any one plant or installation specific job associated with one licensee.

After a 3/5 year period, the options for a move **should be considered** and would normally be:

- site inspection
- assessment work on another type of nuclear installation
- project inspection;
- nuclear safety research;
- international support activities;
- a secondment within HSE for policy or other experience;
- a secondment outside HSE for international or other experience;
- strategy work
- Director's office.

In each case for not more than 3/4 years, before **consideration** of another move to maintain the currency of technical and regulatory expertise.

## Site Inspection and Project Inspection

Inspectors moving into site inspection for the first time would undertake mandatory courses before or soon after appointment. Where inspectors are returning to site inspection then refresher training should be considered.

## Expected time in Site Inspection and Project Inspection Post

- usually no more than 3/4 years at or in connection with any one site.

After a 3/4 year period at one site the options for a move **should be considered** and would normally be:

assessment work

move to site inspection or project work at another site in either the same or another Division,

nuclear safety research;

international support activities

a secondment within HSE for policy or other experience;

a secondment outside HSE for international or other experience

strategy work

Director's office.

in each case usually for another 3/4 years, before **consideration** of another move to maintain the currency of technical and regulatory expertise, (except for the Director's office where secondments postings may be shorter).

# Summary of NSD Inspector Development 'Model'

