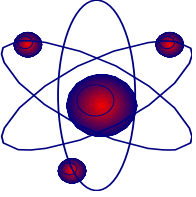


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|---|--|----------|-----------------------|
|  | NUCLEAR SAFETY DIRECTORATE - BUSINESS MANAGEMENT SYSTEM                                |          |                       |
|   | RESEARCH   |          | G/RES/004             |
|   | <b>GUIDANCE: NSD ASSESSMENT OF<br/>REACTOR LICENSEE NUCLEAR<br/>RESEARCH SCHEDULES</b> |          | ISSUE 001             |
|   | Approved By: <b>Peter Storey</b>   | P Storey | Issue Date: 01/12/04  |
|   | Open Government Status: Fully Open   |          | Review Date: 31/11/07 |

## 1. Purpose of Guidance Note

1.1 This guidance is for NSD reactor research Technical Representatives with responsibility for nuclear safety research as set out in G/RES/001, Ref 1. This Guidance Note explains the purpose of the reactor licensee's Nuclear Research Schedule (NRS) and offers advice to assist NSD representatives in assessing the schedules. There is analogous guidance for the assessment of chemical plant research schedules in the parallel set of guidance notes for chemical plant research.

## 2. The Licensee's Nuclear Research Schedule

2.1 The NRS is intended to provide the necessary information to enable NSD to judge the balance and adequacy of the proposed licensee-managed programme of nuclear safety research.

2.2 For each of the designated technical areas the NRS records:

- the licensee's current strategy for their research programme;
- the principal drivers for individual nuclear safety research topics and the associated proposed programme of research projects;
- the outcome of a review of the need for Essential Research Capability (ERC);
- a commentary on how the licensee's research programme is addressing open issues on HSE's Nuclear Research Index (NRI);
- a review of the arrangements for facilitating technical exchanges with NSD on research;
- the licensee's views on participation in international research; and,
- recent or forthcoming significant developments that impact on the licensee's programme of research.

2.3 The NRS will report all the licensee's research activities that, in the licensee's opinion, are addressing nuclear safety in general. Therefore, in addition to

activities that are addressing NRI issues, it will include research that was previously part of the licensee's internal work programme.

### **3. NSD Assessment of a Licensee's Nuclear Research Schedule**

#### **3.1 Timetable**

October

- Licensees supply NSD with Nuclear Research Schedules Issue1 (Draft Programme that has yet to be approved by their respective managements)
- Assessment Request Form issued by NSD 4a:
- NSD technical representative initiates dialogue with licensees' technical representatives on NRS.

February

- NSD/licensee dialogue completed.
- NSD representative issues assessment report to NSD 4a
- NSD 4a issue NSD assessment report to licensees.
- Licensee Nuclear Research Schedule Issue 2 - Proposed Programme

#### **3.2 Sources of information**

The NRS is only one element of a licensee's arrangements that aim to ensure that their procedures for identifying, managing and implementing the outcome of research are transparent to NSD. The licensees have issued internal guidance (agreed with NSD 4A) on the roles and responsibilities of their research representatives, preparation of research schedules, technical exchanges with NSD and the closure of NRI issues, Refs 3, 4, 5 and 6. Together, these should permit NSD representatives to:

- monitor the licensee managed programme of research;
- where appropriate, influence the scope and conduct of individual research projects;
- judge the quality and value of the research outputs.

Thus a licensee's arrangements for research should provide NSD's representatives with the necessary access to the information required to assist their assessment of the NRS.

The NSD representatives are advised to consult their Nuclear Topic Groups (NTGs) for additional input from colleagues to inform their assessment of the NRS.

#### **3.3 Assessment Objectives**

The principal objectives of NSD's assessment of a licensee's NRS are to confirm that:

- the licensee's research strategy is giving proactive consideration to the role of research in nuclear safety
- the licensee's research strategy is responsive to emerging technical issues and other significant technical developments that have the potential to impact upon nuclear safety;
- the proposed activities represent a balanced and adequate programme of nuclear safety research
- the proposed activities are giving appropriate priority to HSE's NRI issues;
- their assessment of ERC has:
  - correctly identified requirements;
  - reviewed the viability of current teams; and,
  - if necessary, identified appropriate activities for maintaining or improving teams;
- the licensee's review of the status of open NRI issues, including progress of ongoing research projects, is acceptable;
- whether or not the arrangements for technical exchange on NRI related research activities are providing NSD with an acceptable degree of transparency and, if not, what action is proposed to improve the arrangements;
- where necessary, licensee's research programmes include activities that facilitate participation in, and/or access to, relevant international programmes.

In forming an overall judgement of the adequacy of the NRS, NSD's representatives should consider the following questions.

- Is there evidence that the licensee's arrangements are applying a systematic approach to the identification of new issues and relevant research activities?
- Is the proposed programme sufficiently outward looking, eg. responsive to developments in other industries?
- Is the level of collaboration with other licensees and other organisations acceptable? Is there an opportunity to collaborate with HSE's major hazards programme of research?
- Is the balance between short term and long term issues acceptable?

#### 3.4 Non-NRI Issue Research Activities

In addition to activities addressing NRI issues each licensee's NRS will include Non-NRI safety related research activities (previously reported to NSD as their Industry Direct Programme). NSD's arrangements for the closure of NRI issues do not apply to Non-NRI activities. However, NSD's technical representative may identify a non-NRI issue research project that is of wider generic interest and where, in their opinion, NSD's arrangements for closure of an NRI issue should apply. The representative should initiate dialogue on such a proposal by informing the licensee's technical representative and preparing a draft NRI issue for the activity. The assessment of the NRS should report the outcome of this dialogue.

### 3.5 Use of the Levy

In parallel with the dialogue on the NRS there should be a corresponding dialogue on the proposed content of the HSE levy programme (see ref 2, G/RES/007 Levy programme). If the NSD rep judges that a licensee proposed project falls within the scope of the levy programme and there is a need for greater NSD control over the project than would be provided by having the issue included in the NRI (see section 3.4), they can consider including it in the levy programme after discussion with the licensee.

### 3.6 Problems/disputes

- NSD Tech Reps should report any problems with arrangements for progressing dialogue with the licensees to NSD 4a who will take these up with the relevant licensee's research coordinator.
- They should also report to NSD 4a at the earliest opportunity any issues with the content of an NRS that, in their judgement, should also be discussed with the relevant licensee's research coordinator.
- There is an agreed procedure to follow in the case of disputes between NSD and the licensees (ref 7).

### 3.7 Assessment Report

NSD Technical Representatives to record their assessment of the NRS's in an assessment report modelled on NSD assessment reports. An important element of the licensees' programmes is evidence of appropriate collaboration. Therefore, NSD 4a advise that a single report covering both licensees' NRS's will suffice, although separate assessment reports for BE and Magnox are also acceptable. The representatives are asked to provide:

- an overview statement on the licensees' proposed programme;
- a brief report against each of the objectives at paragraph 3.3;
- a summary record of any dialogue to resolve difficulties with the proposed programme, e.g. transfer of activities to the Levy funded programme.

Where necessary, NSD4a will facilitate meetings with licensees to progress any difficulties.

#### **4 References**

1. RES/001 Nuclear Safety Research.
2. G/RES/007 Levy programme development and financial arrangements.
3. [Reactor licensee NSR GN 1 Licensee's Nuclear Safety Research Related Responsibilities.](#)
4. [Reactor licensee NSR GN 2 Preparation of Licensees' Nuclear Research Schedules for 2003/2004.](#)
5. [Reactor licensee NSR GN 3 Technical Exchanges.](#)
6. [Reactor licensee NSR GN 4 Project Completion Report.](#)
7. [Reactor licensee NSR GN 5 Resolution of disputes with NII.](#)

#### **5. Abbreviations**

ERC Essential Research Capability

NRI Nuclear Research Index

NRS Nuclear Research Schedule

NSR Nuclear Safety Research