

Report to NuSAC on the annual review of NII's Inspection Programme - June 2003.**Introduction.**

1. NII has been progressively developing and refining its approach to inspection since its inception in 1960. The main purpose of NII's inspection is to check that the licensee is complying with the requirements of the nuclear site licence, investigates incidents and accidents, and takes appropriate enforcement action. Inspection planning was developed for Sellafield in the late 1980s and applied to reactor sites in the early 1990s. However, for a variety of reasons it was not implemented across all inspection action in NII.
2. After the re-organisation in 1998, NII's Senior Management Group agreed to implement a common approach to inspection to ensure a systematic approach to inspection plans in NII. An Integrated Enforcement Strategy (IES) Working Group was set up to develop common inspection strategy.
3. Appendix 1 provides a basic schematic of NII's initial scope of this overall IES process. The intelligence gathering currently breaks down into 4 elements. These are (1) that derived from Site Inspection through compliance inspection, (2) Licensees' capability to generate and manage safety cases, determined through NII's assessment process, (3) the Licensees' corporate body behaviour determined by Corporate Inspection and (4) determination of Licensees' performance from operational feedback of events and incidents. The process also recognises that with time, additional elements will be introduced to strengthen the process. Annually, a Regulatory Review Process is carried out which will review the gathered intelligence and make judgement on NSD's effectiveness, its allocation and distribution of resources and, the prioritisation of its regulatory activities.

Current Position.

4. To date, NII has moved forward in two key areas of the strategy. The first of these is in its Planned Inspection Process and the second is in its Regulatory Review Process.

Planned Inspection Process

5. As NII already had a process for proactively planning inspections of its reactor sites and, as site inspection planning was a high priority activity, it was decided to make this the lead activity for IES. NII recognised that it inspected a number of fundamentally different types of sites and so recognised that its inspection process, in some aspects, would need to be different. However, it was agreed that, where possible, the fundamental structure of its inspection process should be the same and be based on (1) demonstrating Licence

Condition Compliance, (2) testing the systems needed to ensure nuclear safety and (3) having a cycle time of 3 years.

6. The working group therefore established a list of generic plant types and for each of these created an inspection matrix, which would be used to identify the inspection incidence of each licence condition against each of the systems important to safety. Appendix 2 is an example of a generic matrix for a Magnox reactor site. The y-axis identifies the licence conditions, the x-axis identifies the systems important to safety and, elements of the matrix identify which safety systems can be used to test licence condition compliance and indicates which years this will be done, either in year 1, 2 or 3. It should be noted that site wide compliance has also to be tested and in some cases this can be the only test as specific systems for safety have no relevance ie LC 11 emergency arrangements, LC 7 Incident reporting.
7. On completion of the generic plans, these were transformed into site specific plans which were then translated into annual Inspection Plans. An example of Annual Inspection Plan is shown in Appendix 3.
8. It can be seen that the annual plan projects the Inspection programme on a monthly basis. For each month there is space under P (planned) for the individual plan elements to be entered. Alongside it under A (actual outcome) is space for the inspector to enter a rating for the outcome of that inspection. Appendix 4 shows the criteria for the rating.
9. All sites have now operated these inspection plans since the 1st April 2002. At the mid year point and on completion of a full years operation, the process has been reviewed. There have been no issues relating to the planning process itself or with the process for assigning a rating to the inspection outcome. Some issues have been raised which relate to presentational aspects of the inspection outcomes specifically to do with reporting outcomes from multiple inspections of the same topics in a single month. But solutions to these are presently being developed within NII.

Regulatory Review Process

10. During October/November 2002, a multistage regulatory review process was carried out for the first time. The aim of the review is to establish an NII view on the safety performance of each of the sites, establish the nature of expected workload arising from the sites and thus effectively focus NII's resources. At the initial stage, the review is carried out at Unit level with Site Inspection and Assessment staff establishing their view on the safety performance of the Licensees on the plants they are responsible for. The discussion centres on the key indicators shown in Appendix 5 plus the findings from compliance inspection. The group identify, for each indicator, whether they consider the licensees' performance to be adequate to good standard or below standard. Also consideration is given to whether the performance is getting better, static or worsening. Also consideration is given to the nature of projects, modification etc that are expected from the Licensees in the coming

year.

11. The findings arising from these reviews were then aggregated at Divisional and Directorate level to build an NII view of Licensees' safety performance and to determine where NII needs to focus its attention for the forthcoming year.
12. The 2002 review was based on data as identified in the IES strategy but was of various levels of maturity and robustness depending on how far that aspect of IES had been developed. As the IES process is developed and the individual elements created, the review will become more robust.

Future Work

13. During the forthcoming year NII will further develop the individual elements of the IES. Again the process will be an evolutionary one concentrating on developing processes to 1) determine Licensees' performance in Safety Case Management, 2) Inspection of the Corporate Body's support of site safety and 3) Operational Feedback. In each case projects have been established and systems will be developed for introduction into the next review with subsequent refinement and development. The compliance inspection process will continue to evolve in a consistent way building from previous years experience through NII's Inspection Co-ordination Group (ICG).

Conclusions.

14. NSD has established a structure to implement its Integrated Enforcement Strategy. This structure in essence gathers intelligence on Licensees' safety performance and annually reviews its impact on NII's forthcoming plans thus, allowing it to better focus and prioritise its limited resources..
15. The Compliance Inspection and Regulatory review processes have been successfully used during 2002. Both processes were effective and found acceptable for use by NII management and staff.
16. Projects are now in place to develop the remaining elements of the strategy during the forthcoming year.
17. Licensees have welcomed this initiative as it makes NII's inspection process more visible. Additionally, a favourable reception is being received from the international nuclear community to this work.
18. Completion of this work will greatly assist NII in meeting the aims expressed in HSC's Enforcement Policy of being; consistent, transparent, targeted, proportional and accountable in its work.