

# **The State of Security in the civil nuclear industry and the effectiveness of security regulation April 2008 to March 2009**

A Report to the Minister of State for Energy,  
Department of Energy and Climate Change  
by The Director of Civil Nuclear Security

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## Introduction

1. The Office for Civil Nuclear Security (OCNS) regulates security at the 31 civil licensed nuclear sites in the United Kingdom in keeping both with the UK's obligations under the Convention on the Physical Protection of Nuclear Material (CPPNM) and taking account of the recommendations made by the International Atomic Energy Agency (IAEA) in its publication *The Physical Protection of Nuclear Material and Nuclear Facilities* (INFCIRC/225/Rev4)<sup>1</sup>. OCNS is the UK's 'designated competent authority' and as such, complies with the IAEA's recommendations in that it is independent, it has the legal authority to regulate security in the industry, it has access to the UK's intelligence services and has close links with the United Kingdom's Safeguards Office (UKSO).
2. In October 2008, the Department of Energy and Climate Change was formed from the Department for Business, Enterprise and Regulatory Reform. The Director of Civil Nuclear Security (DCNS) acts on behalf of the Secretary of State for Energy and Climate Change and is required to submit a written report each year to the Minister of State on the 'State of Security in the Civil Nuclear Industry and the Effectiveness of Security Regulation'. This report covers the period from the 1 April 2008 to 31 March 2009.
3. OCNS has contributed to the major developments in the civil nuclear industry which have occurred during this reporting period, most notably the Nuclear Decommissioning Authority's (NDA) competition to appoint a new management company for Sellafield and the Nuclear Directorate of the Health and Safety Executive's (ND HSE) Generic Design Assessment (GDA) of candidate designs for a new generation of Nuclear Power Plants (NPP). At the same time, OCNS has maintained its focus of regulating security at existing sites to ensure that security remains both effective and proportionate. In 2008, OCNS reviewed security at those civil licensed nuclear sites with inventories of high hazard material as part of a wider, national reassessment of protective security in the hazardous industries conducted by the Office for Security and Counter Terrorism (OSCT). At the same time, OCNS completed its response to the Cabinet Office's Vetting Transformation Programme.
4. Within OCNS, significant progress has been made in concentrating efforts on front line inspection. A Northern Office was established in ND HSE headquarters in Bootle in September 2008, thereby reducing travelling to civil licensed nuclear sites in the North West and increasing the opportunities for routine interaction with Nuclear Safety Inspectors. Additional inspector posts have been authorised and recruited to the Northern Office and all existing shortfalls have been made good. Administrative staff posts made surplus by the Vetting Transformation Programme and OCNS integration into ND HSE's administrative procedures, have all been removed from headcount through voluntary retirement. The OCNS headcount is less today than at its merger with the Nuclear Safety Directorate of the HSE and the UK Safeguards Office







## **Vital Area Reviews**

16. A Vital Area (VA) is defined as '*An area containing nuclear material or other radioactive material (including radioactive sources), equipment, systems, (structures) or devices, the sabotage or failure of which, alone or in combination, through malevolent acts could directly or indirectly result in unacceptable radiological consequences*'. OCNS regard it as a major priority that VAs are effectively protected. I have mentioned in all previous reports that OCNS, along with Nuclear Safety Inspectors and the Operators' security and technical experts, maintain a programme to review all VAs and to agree security improvements as appropriate.

17. In my last report, I said that, given the importance of VAs, I had invited the CPNI to conduct a peer review of OCNS' Vital Area Review methodology. CPNI has had access to OCNS' files and OCNS staff, civil licensed nuclear sites where Vital Areas occur, Nuclear Safety Inspectors and to the operators' security staff as appropriate. They will be submitting a report to me on their findings before the end of 2009.

## **Vulnerability Assessments**

18. In my last report, I explained that OCNS had been assisting the Office for Security and Counter Terrorism (OSCT) in a national review of protective security in hazardous industries which had begun in August 2007, and which included the civil nuclear industry. I said at the time that there had been early recognition of the fact that the civil nuclear industry, with its demanding regulatory oversight of security, already had a level of protective security, which was both proportionate and effective. OSCT noted that OCNS had concurrently ordered a review of the planning assumptions, against which security profiles at civil licensed nuclear sites would be set, and asked that the outcome of this work could be made available to their own review.

19. In June 2008, OCNS issued a protectively marked document entitled the *Nuclear Industries Malicious Capabilities Planning Assumptions* or *NIMCA*. The *NIMCA* is a planning tool informed by intelligence reporting which describes the types of attack a civil licensed nuclear site's security measures should be capable of defeating. Following the issue of the *NIMCA*, the security staff at civil licensed nuclear sites, along with the Civil Nuclear Constabulary and OCNS, conducted Vulnerability Assessments reviewing the capability of existing security provision to defeat the malicious capabilities outlined in the *NIMCA*. The Vulnerability Assessments were completed in November 2008 and the data gathered is being used to inform the process of continuous improvement, which underpins security at all civil licensed nuclear sites. OCNS welcomed the findings of the Vulnerability Assessments as confirmation that the process of continuous improvement had been concentrating on the correct areas.

### **Generic Design Assessment<sup>3</sup>**

20. In conjunction with the Environment Agency, Division 6 of the Nuclear Directorate is currently conducting a Generic Design Assessment (GDA) of candidate designs for new nuclear power plants to be built in the UK. During this reporting period, this process has become sufficiently developed for the OCNS to contribute to the assessment and two Nuclear Security Inspectors and a project manager have formed an OCNS GDA team to lead in this work, calling in expertise from elsewhere in the organisation as required. OCNS wishes to see security as part of the design for new build nuclear power plants to prevent the need for 'retrofitting' and has welcomed the opportunity for early involvement in this process. OCNS is currently working towards sensible Information Security arrangements which will allow the GDA to be as open and transparent as possible, without compromising sensitive nuclear information. The guidance offered in the OCNS publication *Finding a Balance*<sup>4</sup> underpins this aspiration and from a practical point of view, policy relating to the protective marking of documents has been sensibly modified to allow greater flexibility. In July 2009, OCNS completed Part 7 of the Technical Requirements Document, a protectively marked document which lays down the model security standards for new build nuclear power stations.

21. Related to GDA, OCNS has also contributed to the development of policy within the Department of Energy and Climate Change (DECC) on Strategic Siting Assessments for potential sites for new build nuclear power stations.

### **Civil Nuclear Constabulary**

22. The Civil Nuclear Constabulary (CNC) exists to provide a dedicated armed response capability at designated civil licensed nuclear sites and for designated transports of nuclear material. The CNC operates under the direction of the Civil Nuclear Police Authority (CNPA), a non-departmental public body (NDPB) responsible to the Secretary of State for Energy and Climate Change for 'maintaining an efficient and effective constabulary'. The CNC is funded entirely by those Operators of civil licensed nuclear sites to which CNC officers are deployed.

23. The main priority of the CNC, in my view, is to recruit, train and deploy Authorised Firearms Officers (AFOs) to civil licensed nuclear sites where the nature of the hazard demands the permanent presence of an armed response, and then to maintain the levels of individual firearms, tactical and judgemental skills that such a demanding role requires. In previous reports, I have commented that training is the key to remaining effective. I am pleased to note that in 2008, the Force began a major overhaul of its training structures and programmes and that the CNPA has approved the resources for this important work.

24. **Liaison with an Garda Siochana.** Since March 2005, an agreement has been in place between the UK and Ireland whereby a Superintendent from an Garda Siochana, the police service of the Republic of Ireland, fills a









































