



HM Government



The Scottish
Government
Riaghaltas na h-Alba

Nuclear Emergency Planning and Response Guidance

Concept of Operations

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- Crisis management - this activity covers response actions that are aimed at preventing or averting a nuclear emergency developing further. These will be focused on intervention actions taken at the site by the operator and supported by local responders and other national agencies within the nuclear industry. These actions will be co-ordinated at the local level by the SCG with support from the national level - Cabinet Office Briefing Room (COBR) or the Scottish Government Resilience Room (SGoRR) in Scotland; and
- Consequence (or impact) management – this takes place in parallel to crisis management and is concerned with steps taken to contain and control the probable impacts of a nuclear incident. It includes managing wider consequences such as the health of the public by implementing effective countermeasures. Consequence management is also known as 'Impact Management' and will be led by the SCG supported by national actions coordinated through COBR.

Further details on preparing for nuclear emergencies are set out in Part 2 - Response of NNEPRG.

- Recovery (a longer-term activity of rebuilding, restoring and rehabilitating the community) – This phase formally starts once the situation has been stabilized; i.e. the risk of further radiological release has been removed or reduced sufficiently for recovery to be warranted. However, preparation for the recovery phase will start at the SCC during the response phase with the formation of a Recovery Co-ordinating Group. Recovery from a nuclear emergency may be carried out at the local, national or UK level, depending on the scale of the event and its consequences. In contrast to the response phase, the recovery process can take a considerable amount of time (months or years), as it seeks to support affected communities in the restoration of the physical infrastructure and emotional, social, economic and physical wellbeing.

Further details on recovering from nuclear emergencies are set out in Part 3 - Recovery of NNEPRG.

Levels of nuclear emergency response

Note: Regardless of the potential severity of the event, any off-site radiation emergency would be treated as a national level response. COBR would stand up until such time as the nature of the emergency is assessed and codified. Thereafter COBR would stand-down having assessed the situation to be contained at Level 1. This is consistent with COBR Concept of Operation in response to any emergency that could impact on national wellbeing.

11. Site. The nuclear site operators play a fundamental role in the mitigation of the risk posed by nuclear operations. The plants are designed to reduce risk to as low a level as is reasonably practicable (ALARP) by the installation of multiple back-up systems. Detailed analysis of potential failure mechanisms that could lead to a release of radiological material are understood and operators are trained and exercised thoroughly to ensure appropriate mitigation measures can be promptly implemented. Should an event escalate to a point where a radiological release occurs or is considered imminent, then operators would enact authorised emergency procedures and practices to contain, control and halt any release of radiological material. Training and exercising for such an eventuality is conducted with local Emergency Services and Local Authorities and is regulated under Licence Condition 11 by the Office for Nuclear Regulation (ONR).

12. Local. The local level of response is the basic building block to any emergency in the UK. Emergencies (or major incidents) are routinely handled by the local responders without the need for any significant central government involvement. However, in the event of a radiation emergency, pre-identified central government capabilities are immediately available to provide support. The local multi-agency response is co-ordinated through a Strategic Co-ordinating Group (SCG) located in the Strategic Co-ordination Centre (SCC). Strategic decisions taken at the SCG are developed into collective response activities by a multi-agency Tactical Co-ordinating Group and are delivered at the incident scene through a Forward Control Point. The aim of local response co-ordination for a radiation emergency is to effectively manage the consequences of any radiation risk to reduce the risk of public exposure and harm to the environment.
13. National. The principle of subsidiarity emphasises the importance of local decision making supported, where appropriate, by co-ordination at a higher (central government) level. For clarity, there are three broad types (or levels) of emergency which are likely to require direct central government engagement but which are solely managed locally. These are:
- Significant emergency (Level 1) has a wider focus and requires central government involvement or support, primarily from a lead government department (LGD) - or a devolved administration, alongside the work of the emergency services, local authorities and other organisations. There is however no actual or potential requirement for fast, inter-departmental/agency, decision making which might necessitate the activation of the collective central government response, although in a few cases there may be value in using the COBR complex to facilitate the briefing of senior officials and ministers on the emergency and its management.
 - For example, a radiation emergency at a civil nuclear site that does not require immediate public protection countermeasures to be implemented beyond the site boundary.
 - Serious emergency (Level 2) has, or threatens, a wide and/or prolonged impact requiring sustained central government co-ordination and support from a number of departments and agencies and where appropriate, the devolved administrations. The central government response to such an emergency would be co-ordinated from the COBR, under the leadership of the lead government department.
 - For example, an emergency involving the release of radiation into the wider environment which requires the implementation of public protection countermeasures to be implemented within the Detailed Emergency Planning Zone (DEPZ), or a nuclear emergency overseas.
 - Catastrophic emergency (Level 3) has an exceptionally high and potentially widespread impact and requires immediate central government direction and support, such as a severe beyond design basis. Characteristics might include a top-down response in circumstances where the local response had been overwhelmed, or emergency powers were implemented to direct the response or requisition assets and resources. The Prime Minister would lead the co-ordination of the national response. Fortunately, the UK has had no recent experience of a Level 3 emergency, but it is important to be prepared for such an event should the need arise.
 - For example, a severe and prolonged nuclear emergency on the scale of Chernobyl or Fukushima, occurring within the UK.