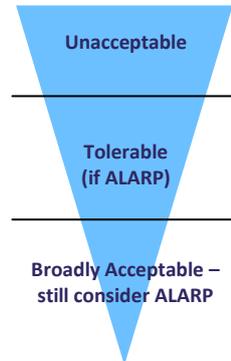




What is it?

There are 37 licensed nuclear facilities within the United Kingdom, including nine operational civil nuclear sites, and a number of processing and defence related facilities. New nuclear power stations are also being built. There is a requirement for all facilities that pose a risk of release of radiation to the public to maintain a valid safety case. A nuclear safety case consists of documentation that includes the identification of all potential events that could challenge the safety systems, justification that adequate lines of protection against these events are in place and demonstration that the risk of a radiological release has been reduced to a level which is as low as reasonably practicable (ALARP). In the production of updates to the nuclear safety case, there are a number of aspects including authorship and independent verification of the safety case documentation as well as production of supporting assessments and analysis. All changes to plant and operations are controlled by varying levels of safety case documentation.



Why is it important?

The production and maintenance of the safety case for nuclear facilities is essential as it provides the evidence for why it is judged to be adequately safe to operate the facility. This requirement is a nuclear site licence condition. Within the safety case and its supporting documentation several key elements are identified including the plant operation and maintenance, operator training and arrangements to ensure the facility remains safe. The concept of ALARP in the UK HSE regulation ensures that all reasonably practicable measures to reduce risk of a radiological release have been identified and implemented in a timely manner.



What we do

Our team members have completed a range of safety case projects for major nuclear companies such as EDF Energy (Generation and Nuclear New Build), Magnox and Babcock International Group. In particular they bring experience in plant faults, hazards, plant modifications, fuel route and pre-construction safety case submissions. CRA employs experts who understand the UK regulatory requirements for safety case production as well as having experience working in the international community (e.g. WANO, IAEA). They have experience in authorship and verification as well as independent assessment (e.g. independent nuclear safety assessment and independent peer reviews). In addition, CRA can produce supporting safety case material such as ALARP assessments and optioneering, development of Fault Schedules, review of Safety Systems and updates of Operational Technical Specifications. Bespoke safety case development training courses can also be provided depending on our clients' needs.

Our capability statements describe each of our Safety Case services.



Given the knowledge, strength and depth of our team, we believe CRA has extraordinary and invaluable experience of working closely with clients on nuclear sites across the UK.