

Adding Value to Independent
Safety Assessment:
A Nuclear Industry Perspective

Andrew Buchan,
Co-Chairman,
Peer Review Forum

Background to Peer Review Forum



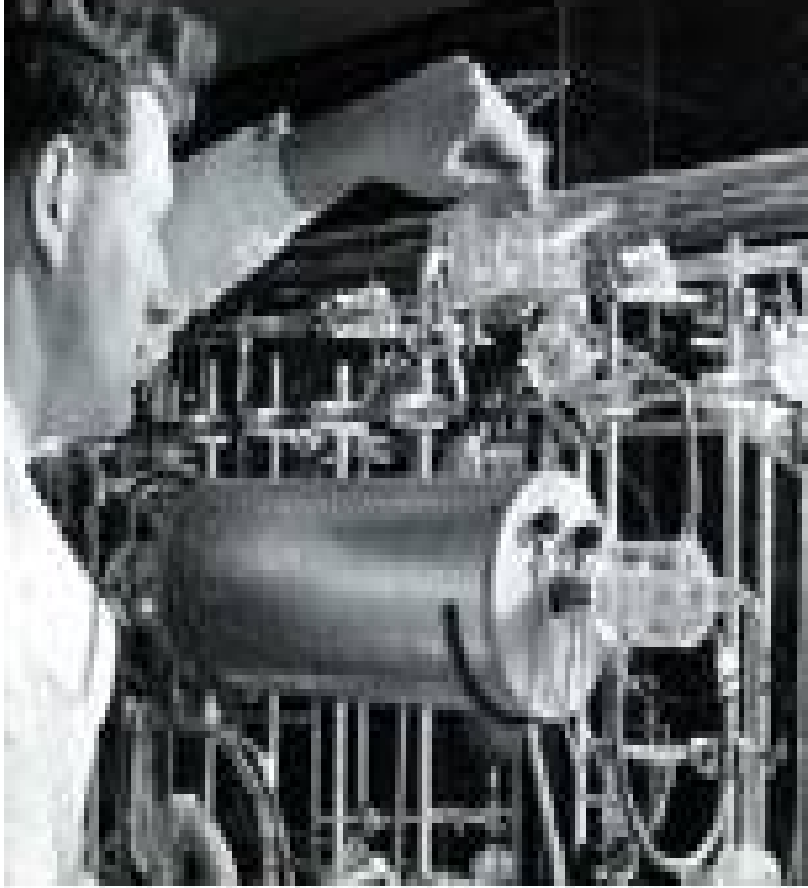
- Peer Review Forum was established in 2001 by BNFL, UKAEA and AWE to give a forum for ISA (Peer Review) within the Nuclear Industry
- Now comprises British Nuclear Group, UKAEA, AWE, British Energy, RRA, DML, GE Healthcare, URENCO, BAE Systems, Babcock

Drivers for the Peer Review Forum



- Dissemination of Good practice
- Cost optimisation
- Avoidance of regulator ratcheting
- Mutual support of practitioners
- Learning from experience

Scope and Constraints



- Peer review – the independent review of nuclear safety cases
- Different licensees have different remits for their peer review process
- Discretion and experience needed in applying processes
- The group is sharing composite experience from peer review of many types of safety submissions

Topics Considered to Date



- Each new licensee representative explains their peer review process on joining the group
- Peer review issues related to near misses and events: Nuclear eg Davis Besse - Non Nuclear e.g. London Underground, Buncefield, NASA
- Peer review aspects of common documentation e.g.
- *Decommissioning*
- *Site Wide Safety reports*
- *Commissioning Documentation*
- *Interactive Peer Review*

Positive Outputs to date



- Resist NII challenge to be prescriptive on Peer review in SAPs
- Dissemination of Information
- Presentation to I Mech E seminar –Fit for Purpose Safety Cases in a Changing Nuclear Industry
- BNGSL being able to adopt a more interactive approach based on UKAEA and AWE experiences
- Benchmarking visits between licensees
- Increased confidence in approaches

Future Issues



- Peer review of submissions related to organisational changes – how should these be considered
- Peer review of Environmental Submissions
- Longer Term change of industry – types of skills needed, availability of resource to be able to support peer review. Balance of in-house/external resource
- Evaluation of Impact of revised NII Safety Assessment Principles

What have we learned thus far: Safety Case Preparation- Health Check

- Lack of SQEP writers
- Late appointment of peer reviewer.
- Lack of overall resource.
- Lack of understanding of the process - There may not always be an intelligent customer.
- Lack of ownership of cases by Facility Management.
- Underestimation of time required by process.
- Inaccessibility to facility of Authors.
- "Fire fighting" interrupts planned process.
- Contractual problems.
- Change of author during the project.
- Lack of money.
- Unrealistic imposed milestones and external pressures on the project.
- Regulatory delays.
- Lack of interaction during the review.
- Poorly defined scope of safety case.
- Ill-defined specification of safety case.
- Incorrect categorisation.
- Lack of challenge to the process.
- Poor records (e.g. drawings) availability.
- Problems arising during assessments (e.g. inventory changes).
- Engineering substantiation of old facilities.
- These issues will not be confined to nuclear safety cases and there are useful lessons here across industry sectors

Conclusions

- The Peer Review Forum has proved a useful vehicle for improvement and sharing of best practice
- Processes have improved as a result
- The results of collective experience can be very useful in increasing confidence
- Peer review forum looks forward to working with SCSC/ISA as a specific sector group.