

RIC 2006

Session T2E

Use of Operating Experience (Regulator/Operator/Licensee)

International Exchange of Operational Experience at the Nuclear Energy Agency

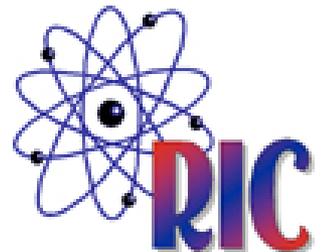
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Nuclear Energy Agency (NEA)

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Nuclear Safety at the NEA

◆ Main Expert Groups:

– Regulatory

- ❖ Inspection Practices
- ❖ Operating Experience
- ❖ Public Communication

– Technical

- ❖ Structural Integrity
- ❖ Risk Assessment
- ❖ Accident Management
- ❖ Human & Organisational Factors
- ❖ Fuel Cycle Safety

Working Group on Operational Experience (1)

◆ Objectives include:

- Analysis of OE is essential to discuss and judge the need for regulatory response in different timeframes and to assess the effectiveness of various regulatory actions in preventing recurrence of certain types of events in the **short to medium term**.
- Close interaction between analysis of OE and analysis of **inspection experience**.
- Allow re-assessments of safety, additional research or other actions to maintain and improve safety in the **long term** (e.g., trending, safety significance, specific phenomena like sump plugging, etc.).

Working Group on Operational Experience (2)

◆ Activities include:

- Meet 1 or 2 times/yr to share information from member countries OE covering trends, significant important events, responses/measures taken, and lessons learnt.
- Meet to review the information from the Incident Reporting System and other data bases.
- Promote development and sharing of improved techniques/methods for the collection, assimilation, review and analysis of incidents.

◆ WGOE membership includes Regulators, Technical Support Organisations and Industry.

Regulatory Challenges in Using Operational Experience (1)

NEW **CNRA Green** Booklet

- ◆ CNRA Senior Level Expert Group was formed to evaluate and report on Regulatory Challenges in Using Operational Experience (RCOE).
- ◆ The fundamental objective of all nuclear safety regulatory bodies is to **assure** that nuclear utilities operate their plants at all times in an acceptably safe manner.
- ◆ In meeting this objective, learning from experience, i.e. 'lessons learned,' has been a key element throughout the history of nuclear power and the CNRA has recognised that there is a continuing need to further enhance the international exchanges in this area.
- ◆ The report was prepared by Dr. Thomas Murley, on the basis of discussions with and input provided by the members of the Senior Level Expert Group.

RCOE (2) - Some Key Elements

- ◆ Maturation of nuclear programmes in OECD countries has brought steady improvements in the operational safety of NPPs. One major reason has been the extensive use of lessons from OE; to backfit safety systems, improve operator training and emergency procedures, and to focus more attention on human factors, safety culture and nuclear QA systems.
- ◆ Now, however, questions are being raised about whether the lessons from OE are being used commensurate with their importance to safety such as:
 - lessons may be learned but they are subsequently **forgotten over time**,
 - often **nothing is done** in response to information learned about others' experiences,
 - there is a tendency to consider **foreign** operating experience as **not relevant** to one's own situation, and
 - more generally, operating experience reporting is not **meaningful** if it is not used to promote operational safety.

RCOE (3) – Some Key Findings

- ◆ WGOE recently noted, “Almost all the recent significant events reported at international meetings have occurred **earlier** in one form or another.”
- ◆ Counteractions are usually well known, but information does not always seem to reach end users or **corrective action programmes** are not always rigorously applied.
- ◆ A separate concern is that not all important OE is reported to established international reporting systems in a timely manner.
- ◆ The **operator has the responsibility** for safely operating a NPP, and hence it is important for the operator to have an active program for collecting, analyzing and acting on the lessons of OE that could affect the safety of his plant.
- ◆ It is the regulator’s responsibility to oversee the operator’s activities to assure the plant is operated safely. Therefore, a key topic for this report is the role of OE in the regulator’s management system.

Recent NEA Reports

- ◆ Safety of Modifications at Nuclear Power Plants -The role of minor modifications and human and organisational factors.
- ◆ Technical Note on Lessons Drawn from Recent (2003-2004) Nuclear Power Plant Operating Experience.
- ◆ Proceedings of the Workshop on Modifications at NPP - Operating Experience, Safety Significance and the Role of Human Factors & Organisation.
- ◆ Nuclear Regulatory Decision Making.
- ◆ CNRA - Nuclear Regulatory Inspection of Contracted Work Survey Results.
- ◆ Proceedings of the Workshop on the Regulatory Uses of Safety Performance Indicators.

Topical Conference on Improving Nuclear Safety through Operating Experience Feedback: Present Challenges and Future Solutions

- ◆ 29th – 31st May 2006, Cologne, Germany
- ◆ Sponsored jointly by OECD NEA, IAEA and WANO, hosted by GRS*
- ◆ Preliminary Programme
 - Session I - Operational Experience Feedback: Actual Experiences
 - Session II - Operational Experience and Closing the Feedback Loop
 - Session III - How to efficiently use operating experience
- ◆ On-line registration available at:
<http://www.nea.fr/html/nsd/workshops/opex2006/welcome.html>

* Gesellschaft für Anlagen-und Reaktorsicherheit

Nuclear Energy Agency

- ◆ 28 Member countries representing ~ 85% of world's installed nuclear capacity make up the NEA.
- ◆ In addition to nuclear safety NEA also covers radioactive waste, radiation protection and public health, nuclear law and liability, nuclear science and nuclear data.
- ◆ The NEA has a staff of ~ 72. The annual budget for the Main Secretariat is about 9.2 million Euros.
- ◆ Internet Resources – to obtain additional information on NEA, CNRA and WGOE, including recent reports, upcoming events, etc. please go to:

<http://www.nea.fr>

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The OECD Nuclear Energy Agency

