



World Association of Nuclear Operators
Working together to improve safety and reliability

The Foundation

- In 1989, 3 years after the Chernobyl disaster, the nuclear industry worldwide gathered and created WANO as a way to work together to prevent another such accident from happening ever again.
- It was recognised that an adequate level of nuclear safety can only be attained by striving for excellence, not by just satisfying norms and inspecting
- It was recognised that one plant or even one utility, however big, cannot realise this on its own
- We have to work together worldwide

WANO Mission

To maximise the safety and reliability of the operation of nuclear power plants by exchanging information and encouraging communication, comparison and emulation amongst its members.

WANO Structure

- Membership: 198 stations, 446 units in 31 countries/areas
- Four regional centres: Paris, Moscow, Tokyo, Atlanta
- One coordinating centre in London
- Four regional governing boards
- One WANO governing board
- 50 permanent staff, 50 secondees, each year more than 300 peers and also many interpreters

WANO Programmes

- Peer reviews
- Operating experience exchanges
- Professional and technical development
- Technical support and exchange
 - Technical support mission
 - Performance indicators
 - Guidelines and good practices

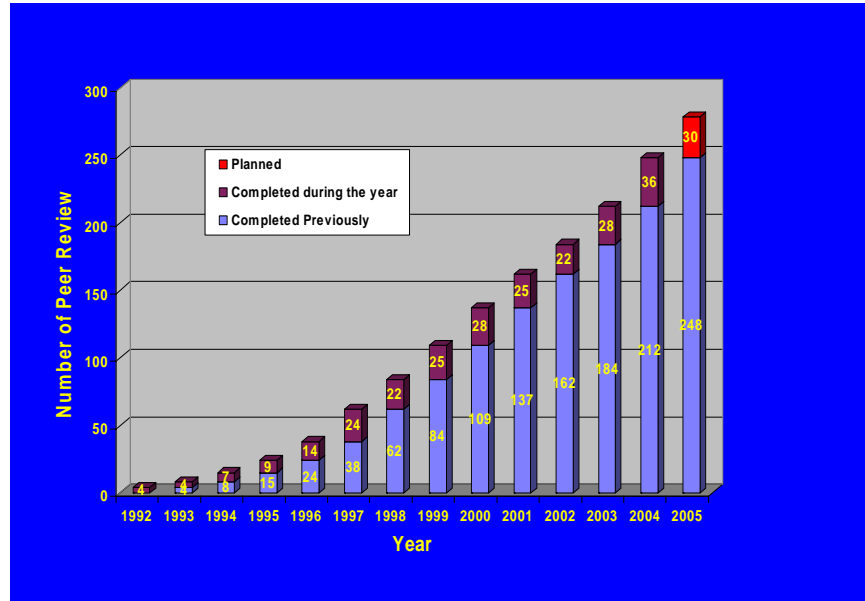
Peer Reviews

- Frank look from outside, confidentiality
- Identify Areas For Improvement
- 15-20 Peers from around the world
- Using a WANO wide set of performance objectives
- About three weeks onsite watching plant activities
- Alongside plant peer reviews – also corporate peer reviews

Process

- Pre visit: scope, advance information
- Review: observations - field notes

- Development of Areas for improvement, identification of strengths
- Exit representative
- Plant debrief
- Report – exit meeting
- Plant response
- Follow up



Operating Experience

- All WANO members are alerted to events that have occurred at other plants
- Members can take action to prevent similar events at their own plants.
- Event reports provide valuable information for a broad scope of plant activities.
- About 700 event reports per year

Technical Support Mission

- Small teams of experts
- Usually multi-national
- Visits to help a plant address a defined problem or weak area
- Example topics out of many
 - Human performance
 - Self assessment
 - Scram reduction
 - Outage management

Our world is changing: new challenges

- Plants grow older
- Personnel grows older
- Competition: cost cutting
- Non nuclear executives
- Nuclear renaissance
- Large fleets coming

Our world's future

- Climate change: Kyoto is not enough, action is urgent
- Increasing electricity demand: plus 60 % by 2030
- Renewables cannot cope, fusion is too far away

The public opinion

- Our industry has not yet completely recovered from Chernobyl
- In many parts of the world the public opinion is changing favourably

One single accident can tip this over again, for many years

WANO has to take one step further

Not only run programmes effectively, but support plants and utilities actively, in order to:

- Prevent a new serious nuclear accident
- Prevent important, costly precursor events
- Keep sufficient margins to these worldwide

Conclusion

In view of the nuclear renaissance WANO's mission is more relevant than ever.

Experience shows that the nuclear industry must work together intensively to be successful.