

WESTERN NUCLEAR
REGULATORS ASSOCIATION

**WENRA COMMON VIEWS
ON
THE SIGNIFICANCE OF NATIONAL RESPONSIBILITY FOR NUCLEAR SAFETY**

July 2003

**NATIONAL RESPONSIBILITY FOR NUCLEAR SAFETY REGULATION IS
EFFECTIVE FOR ENSURING HIGH LEVEL OF SAFETY AND CONTINUOUS SAFETY
IMPROVEMENTS**

Principle of strong national regulations is one of the cornerstones of the International Convention on Nuclear Safety

All current and all new Member States of the EU operating nuclear power plants are Parties to the Convention on Nuclear Safety. Ratification of the Convention implies that they are legally committed to a high and internationally recognised level of safety in the nuclear power plants under their jurisdiction. The Parties to the Convention are further committed to a national responsibility for safety as well as independence of their regulatory bodies.

The principle of national responsibility and the requirements on regulation were included in the Convention on Nuclear Safety on the basis of positive experience in countries where strong national regulations have been emphasized since start up of the use of nuclear energy. In such countries the safety record is good and indicates high safety level.

Effective regulatory control requires in-depth knowledge of the facilities being regulated; this knowledge is only with the national regulators

Safety of a nuclear power plant is a complex technical and human issue that cannot be reached through mere conformity with rules and regulations and that cannot be measured with simple numerical values. Safety cannot be verified in a straightforward and objective manner. There are alternative means to achieve the same safety goal, and the final judgement on adequacy of safety level is always subjective.

All plants in operation to-day have been designed and constructed individually, and the relative safety importance of their parts cannot be judged from direct comparison with other plants. A necessary condition for a qualified safety

judgement is a thorough understanding of how various safety relevant factors are integrated to a whole. Assessment of nuclear safety therefore requires not only an in-depth knowledge on related technical and physical issues but also a thorough familiarity with the details of each nuclear facility and the technology used. Furthermore, it is important to know the infrastructure and technical culture in which the plant is operated. Such knowledge and familiarity exists today with national regulators and their technical support organisations.

Achievement of the level of knowledge that is required for making credible safety judgements on foreign nuclear facilities is not possible without several years of work experience from those facilities. This is why there is a wide consensus documented in the Convention on Nuclear Safety that a conclusion on adequate nuclear safety can be drawn only by the national authorities.

Harmonised safety practices, that are followed in all countries of the world are needed

There is a general agreement among the EU institutions and the EU Member States that no new technical regulations and definitions should be introduced at the regional (EU) level. Instead, a respect of the IAEA nuclear safety standards has to be ensured. All European countries operating nuclear power plants are to day involved in the IAEA's nuclear safety standards work.

The IAEA standards are written with the aim to document best available safety practices, and the clearly stated objective of the standards programme is to enhance the level of nuclear safety worldwide. In this work each country can systematically benchmark its own situation to the international practice.

Safety must not be stagnant, but safety must be continuously improved

Some of the guidance given in the IAEA safety standards is of fundamental nature and needs to be taken as mandatory when issuing national regulations. Other IAEA standards are to be taken as commendable goals that are met by different countries and by different plants to varying degree. These goals are moving targets, and are therefore not fully achievable at any point of time. Their value is that they serve as a driving force for improvement and as a commendable goal for everybody. As such they are a sound support for the national regulators.

National responsibility for safety provides the fastest way to consolidate improved practices into safety regulations. Modifications are needed on one hand to implement the new principles written in the IAEA safety standards. In addition, national regulators must promptly react to new safety concerns that may be identified through operating experience or from research.

A possibility to make modifications to regulations separately in each country is the most efficient way to observe the principle generally adopted by European

nuclear regulators: there has to be a continuous striving for enhanced level of nuclear safety.

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Well-established peer review mechanisms support the national regulators to adopt the best international practices

Notwithstanding the principle of national responsibility, it is necessary that national nuclear safety regulators interact and learn from each other. To day there are several peer review mechanisms for this purpose. Among these are the regular review meetings of the Convention on Nuclear Safety, the IAEA service called International Regulatory Review Teams (IRRT), and the nuclear safety harmonisation work agreed by the European national nuclear safety regulators.

The IRRT service is a well-established peer review mechanism between the IAEA Members States. The IRRT missions use the IAEA safety standards as the basis of their work, and thus build on worldwide consensus on good nuclear regulation. The scope of an IRRT mission is much wider than the scope proposed by the EC for similar European reviews, and also the number of man-days worked on an IRRT mission is higher by factor of 20-30. The experience from IRRT missions has shown that even with such large effort it has been difficult to understand all essential features in the work of the reviewed regulatory organisation, and therefore the need to fulfil recommendations of an IRRT mission are left to the discretion by the reviewed country.

Close regular co-operation has been established since 1999 between all European nuclear regulators. They have jointly formed an association called WENRA, and this association has already proven to be an effective instrument for assessing and enhancing the level of harmonisation of the safety regulations in its member states. In parallel with harmonisation of the regulations, the WENRA members are committed to develop their national practices so that the agreed reference safety level will truly be achieved in each country.

WENRA work of harmonisation is based on the IAEA safety standards, and thus provides feedback on the applicability of the IAEA standards. The joint positions of WENRA can thus be used also for improving the IAEA standards.

WENRA is willing to prepare regular reports on the status of nuclear safety in EU-countries and the achievements to higher harmonised safety levels. These reports are available for the European Institutions.

Nuclear safety is improved in a number of co-operation forums between regulators

The national nuclear regulators of the EU Member States have co-operated in a joint working group since the 1970's. This group and its subgroups have produced many valuable recommendations to the European and worldwide safety developments, and these are generally well implemented in the EU Member States.

Among other joint forums between the national regulators it is necessary to point out the CNRA and CSNI of the OECD Nuclear Energy Agency, and the numerous working groups under those Committees. These form a professional network between countries with advanced nuclear programmes. Since the 1970's this network has been used efficiently to benchmark and improve national safety practices.