



LEGISLATION IN HUNGARY

Implementation of the Act on Atomic Energy

Zoltán Szónyi
(szonyi@haea.gov.hu)
Hungarian Atomic Energy Authority

Abstract The presentation gives a short overview of the history and development of the Hungarian nuclear regulatory regime.

The new Act on Atomic Energy is a consequence of the significant internal and international changes. The main characteristics of the Act represent the new expectations and challenges of the nuclear community and the solid and reliable Hungarian legal solutions.

The competences, duties and responsibilities of Hungarian Atomic Energy Authority and of the joining other relevant ministries and the complete regulatory framework guarantee the enforcement of the requirements set by the Act.

1. Brief history of the Hungarian nuclear regulatory regime

In the beginning the regulation of safety requirements and the licensing of nuclear facilities was dependent on the Minister of Industry, who first authorized the State Supervisory on Energy and Safety to perform this task. For this purpose a ministerial decree was published (No. 5/1979 (III.31) NIM) regarding safety issues of nuclear power plants; regulating the licensing process, inspections and safety engineering requirements; and it designated the regulatory body in these issues. Its appendices served as volumes of safety regulations for nuclear facilities - regulations which have been in force until very recently.

The first Atomic Energy Act, issued in 1980 (Act No. I of 1980) affirmed this regulation; it confirmed the traditionally developed divided system of responsibilities in other areas such as radiation safety, environmental protection, physical protection, etc.; and it formed the basis for numerous ministerial decrees that were issued later.

This legal system and regulatory frame were in force by the end of 1990.

Significant changes were introduced into the regulatory system in the early 1990s when, based on Governmental Decree No. 104/1990 (XII.15) Korm, the Hungarian Atomic Energy Authority (HAEA) was established and the Nuclear Safety Inspectorate, as the regulatory body for nuclear safety in the first instance, became part of the HAEA.

The Hungarian Atomic Energy Commission (HAEC) was designated as the licensing authority for nuclear installations with its president being responsible for running of all the bodies mentioned above.

Because of the significant changes that took place in the nuclear community (many new expectations) as well as in Hungary (social and economical transition) during the first half of the 1990s it became more and more urgent to renew the legal system of the regulatory control of nuclear energy. After several years' preparatory work the new Act on Atomic Energy was passed by the Hungarian Parliament in December 1996 (Act No. CXVI/1996), and the most important governmental and ministerial orders and decrees have followed it and are already in effect or will be in effect very soon.

The new Atomic Energy Act has been constructed according to the most advanced international standards and principles and it is in compliance with the requirements and recommendations of the European Union, the OECD-NEA and the IAEA.

2. The main characteristics of the new Act on Atomic Energy and changes compared to the previous regulations

- the exclusive state ownership of nuclear installations and radioactive substances has been terminated,
- it declares the organisational and financial independence of the Authority,
- it transfers the responsibility for licensing nuclear facilities from the HAEC to the HAEA,
- it declares - in conformity with the Nuclear Safety Convention, promulgated in Hungary by the Act No. I. of 1997 - the over all priority of the safety and defines the operator's responsibility for the safe operation as well as the governmental responsibility for control and supervision of all nuclear facilities and materials,
- it maintains and quantifies the regulation of nuclear liability that was introduced in the first Act on Atomic Energy, taking into account the fact that Hungary joined the Vienna Convention on third party liability as well as the results of the revision of this Convention,
- it authorizes the HAEA to impose a fine on all users of nuclear energy for violation of safety rules and requirements,

- it prescribes that licensees are liable to cover the costs of the final disposal of radioactive waste, as well as the interim storage and final disposal of spent fuel, and of the decommissioning of nuclear facilities by setting up a Central Nuclear Fund,
- it declares the necessity of human resources and education as well as R & D activities for the safe use of nuclear energy,
- it stresses the importance of abnormal event assessment, reporting and feedback. Information given to the public is required to be an ongoing and comprehensive activity of the licensees and the authorities,
- it gives directives for emergency planning and preparedness,
- it defines the regulatory tasks of all governmental bodies such as ministries, state offices, civil defence, military and police task forces, i.e. all those directly involved in nuclear and radiation safety regulations.

Under the new Act the establishment of a new nuclear facility or radioactive waste disposal facility as well as the addition of any further units containing a nuclear reactor to the existing nuclear power plant requires first of all the approval of Parliament.

3. The Government and the role of Hungarian Atomic Energy Commission (HAEC) and of Hungarian Atomic Energy Authority (HAEA)

It is the Government's task to control and supervise the safe application of nuclear energy. The Government provides for the execution of these tasks through the HAEC, the HAEA as well as the Ministers concerned.

In matters related to the peaceful use of nuclear energy, the HAEC is a commission that prepares decisions and carries out co-ordination, makes decisions concerning issues defined under special legal regulations, and undertakes supervisory tasks. Members of the HAEC are the senior officials of the ministries and central public administration organizations performing regulatory tasks pursuant to the Act in the field of the application of nuclear energy. The members of the HAEC are appointed and relieved by government Ministers and the heads of the central public administration organizations concerned, with the agreement of the President of the HAEC. The President of the HAEC is appointed (and relieved) by the Prime Minister from the members of the Government. At present, the President of the Commission is the Minister of Economy, who performs this task independently of his ministerial responsibilities.

The Commission's President presents an annual report to the National Assembly on the safety of the utilization of nuclear energy.

In the field of the peaceful use of nuclear energy, the HAEA acts as a central public administration body with autonomous tasks and regulatory authorization under the control of the Government, providing preliminary review of legislation and regulatory rules related to the use of nuclear energy. The Director General and his Deputies are appointed and relieved by the Prime Minister. In order to ensure a scientific basis for the governmental, regulatory and nuclear emergency preparedness measures, a Scientific Board supports the work of the HAEC and the HAEA.

The Government exercises supervision over the HAEA through the President of the HAEC. The control and supervision of the HAEA is required to ensure the primary enforcement of all aspects of nuclear safety. The HAEA may oblige the licensee to pay a fine for violating a legal regulation or a safety regulation, and for failing to comply with an obligatory standard or with the provisions set forth in an individual regulatory licence issued based on these regulations and standards. Special legal regulations prescribe the amount of the fines and the utilization of them.

4. Implementation of the Act on Atomic Energy

45 regulations have been prepared (some more documents are still in preparation) for the implementation of the requirements of the Act, containing the rights and responsibilities of the relevant authorities.

- 12 of them Governmental Decrees
- 33 of them ministerial decrees

5. Regulatory role of HAEA

From the nuclear safety aspect there are 2 decrees of high importance:

Government Decrees on the statute of the IIAEC and the HAEA (No.87/1997 (V.28) Korm.) and that on nuclear safety regulation and procedures of the HAEA. (No. 108/1997 (VI.25) Korm.) According to the latter one the former Nuclear Safety Inspectorate as the Nuclear Safety Directorate (NSD) of the HAEA is the nuclear safety regulatory body in the first instance while in the second instance level it is the Director General of the HAEA who is the final decision maker in the case of an appeal against a resolution of the NSD.

The appendices of the latter decree are the nuclear safety regulations in 5 volumes that describe the mandatory regulatory requirements for nuclear facilities.

Taking into consideration the new legal power of the HAEA which is now the main licensing body of nuclear installations and their equipment, restructuring of the HAEA became appropriate, also according to the spirit of the new Act.

HAEA has regulatory rights and responsibilities in the following areas:

5.1. Nuclear Safety

(within the frame of NSD)

- licensing for siting, construction, enlargement, commissioning, operation, modification, taking out of operation and decommissioning of nuclear facilities;
- nuclear safety inspection of nuclear facilities;
- regulatory licensing of civil structures related to nuclear facilities;
- nuclear safety and technical radiation protection
licensing, and
inspection of
design, manufacture, installation, commissioning, operation, modification (repair),
import from abroad taking out of operation and decommissioning of
nuclear equipment;
- inspection of the quality assurance or having it inspected by an institution designated by the NSD.

The HAEA - NSD's regulatory activity has been extended to technical radiation protection, civil structures and engineering and - as co-authority - to physical protection and emergency preparedness. For the last item, NDS has initiated the installation of its multipurpose center of emergency response, training and analysis (CERTA) equipped with hardware and software tools for independent analysis of abnormal events and accidents giving estimations on source term and possible escalation of the consequences of accident scenarios. The center serves also for the training of regulatory staff members using simulators as well as providing them with PSA - based tools to assist in their everyday decision making work.

As mentioned, one of the governmental decrees issued the mandatory regulations. In addition, the HAEA's Director General has issued several guidelines. If these are complied with, the regulatory procedure is simpler. However, in case of differences, the licensee has to prove that its version is equivalent or even better from the safety point of view.

The mandatory documents are as follows:

- Vol. 1. Regulatory Procedures of NPPs
- Vol. 2. Quality Assurance
- Vol. 3. Design Requirements of NPPs
- Vol. 4. Operation Requirements of NPPs
- Vol. 5. Regulations of Training and Research Reactors

In the first phase, 33 guidelines have been issued. The HAEA is obliged to review and, if necessary, to amend its regulations every five years, and the intention is to do the same with guidelines - but more frequently. Further guidelines will be issued according to necessity.

5.2. Safeguards for accountancy and control of nuclear materials (within the frame of GND)

The new Act on Atomic Energy and its executive orders place responsibility on the HAEA's Director General for executing Hungary's safeguards agreement with the IAEA as well as for ensuring the fulfilment of the detailed regulations issued on the accountancy system of nuclear materials and their international control.

The General Nuclear Directorate of the HAEA (more precisely its Department of Nuclear and Radioactive Material) runs the State System of Accountancy and Control with the assistance of the Institute of Isotopes of the Hungarian Academy of Sciences performing the computer based accountancy work.

The new Act on Atomic Energy reconfirms the legal framework of nuclear export control in Hungary and authorises the Government to issue the relevant regulations. The new governmental decree on nuclear exportation and importation supersedes the previous decree of 1986.

5.3. Registration of radioactive materials and approval of their packaging (within the frame of GND)

The accounting system is based on the central registration of radioactive materials and products that was put into operation as soon as the use of radioactive isotopes started in Hungary.

Under the executive orders of the new act on Atomic Energy the HAEA's Department of Nuclear and Radioactive Material is responsible for the Central Registry. In discharging this responsibility it relies on the assistance of the Institute of Isotopes of the Hungarian Academy of Sciences in running the computer based accountancy.

Approval of the packaging of radioactive materials and the approval of and the notification on their transport required by international transport regulations is also performed by the HAEA's Department of Nuclear and Radioactive Material with the expert support of the Institute of Isotopes.

6. Tasks and responsibilities of other ministries and regulatory bodies

In the licensing procedure of nuclear facilities under the responsibility of the HAEA

- the Minister of the Interior - through the offices of the National Police Force, and the Fire Protection and Civil Defence Services - enforces the considerations relating to public and internal order, fire protection, security, as well as civil defence and nuclear emergency management;
- the Minister of Agriculture and Regional Development through the offices of the Animal Health and Food Control Stations, and in agreement with the Minister of Public Welfare - enforces the considerations related to food, plant and animal hygiene, as well as soil protection;
- the Minister of Economy - through the Hungarian Geological Survey - enforces the considerations related to geology;
- the Minister of Transport, Communication and Water Management - through an organization appointed in a separate legal regulation - enforces the considerations related to water utilization, water base protection, and water damage mitigation;

- the Minister of Environmental Protection - through the offices of the Local Environmental Inspectorate - enforces the considerations related to environmental protection, nature conservation and water quality protection;
- the Minister of Public Welfare - through the State Public Health and Medical Officer Service - enforces the health and radiation protection considerations related to ionizing radiation;
- the competent building authority for the area enforces the general considerations related to regional planning and building;
- the President of the Hungarian Mining Authority enforces mining technological, mining technical and mining safety considerations.

Conclusions

The new Act on Atomic Energy is a result and consequence of a long-term development and of a systematic collection of national and international experiences and proven practices.

The enforcement of the legal requirements is guaranteed by the complete and solid regulatory framework and by the committed activity of Hungarian Atomic Energy Authority.