Nuclear legislation of Ukraine as basis for nuclear industry development

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Today there are fifteen power units in operation at the sites of Ukrainian NPPs, with thirteen represented by a VVER-1000 reactor installation, and the remaining two – by VVER-440.

Ukraine ranks eighth in the world and fifth in Europe in terms of the total installed capacity of NPPs.

The share of nuclear power generation remains consistently high $\approx 50\%$. 
Setting-up the conditions for reliable and proper satisfaction of the demand for energy products at the lowest total costs that also has to be economically justified

Improving the energy security of the country

Enhancing the effectiveness of consumption and use of energy products

Reducing the human impacts on the environment and securing the public protection in the area of industrial safety of the FEC (Fuel and Energy Complex)

In the nuclear sector envisages:

Improving safety of NPP’s operating units

Extending service life of NPP’s operating units

Construction of new power facilities at NPPs

Development of uranium and zirconium production, and nuclear fuel production for NPPs
Ukrainian system of normative regulation in nuclear sphere

- International Conventions
- Nuclear laws and international agreements
- Normative acts (approved by the Cabinet of Ministers of Ukraine and the President of Ukraine)
- Normative acts (approved by the SNRCU, other authorities of state regulation of nuclear and radiation safety of Ukraine)
Nuclear related laws

The Law of Ukraine “On the Use of Nuclear Energy and Radiation Safety”
- determines rights and duties of citizens in the sphere of use of nuclear power, regulates activity connected with use of nuclear plants and sources of ionizing radiation
- determines competence of the Verkhovna Rada of Ukraine, the Cabinet of Ministers of Ukraine, Autonomous Republic Crimea, local bodies of executive power and local self-government in the sphere of use of nuclear power and radiation security
- ensures radiation safety of patients and staff of medical establishments, when sources of ionizing radiation are used for medical purposes
- sets responsibility for nuclear harm and enumerates violations in the sphere of nuclear power use

The Law of Ukraine “On Permit Activity in the Sphere of Use of Nuclear Power”
- defines legal and organizational principles of permit activity in the field of nuclear energy utilization, as well as general provisions regulating public relations which occur during its performance
- defines the list of types of activity in the field of nuclear energy utilization, which shall be subject to licensing
- sets the procedure of licensing of activity of operating organizations on different stages of operating cycle and storages for burial of radioactive wastes
- defines rights and duties of subjects in the field of nuclear energy utilization
Nuclear related laws [cont.]

The Law of Ukraine “On Handling Radioactive Wastes”
- aims at ensuring of human and environmental protection from the harmful influence of radioactive wastes at present and in future and applies to all types of activity with radioactive wastes
- defines competence of the Verkhovna Rada of Ukraine, the Cabinet of Ministers of Ukraine, the Autonomous republic of Crimea, local bodies of state executive power and bodies of local self-government in the field of handling radioactive wastes
- defines state regulation in the field of handling radioactive wastes
- envisages the Governmental Program on Handling Radioactive Wastes

The Law of Ukraine “On Mining and Processing of Uranium Ores”
- regulates peculiarities of legal relations during mining, processing of uranium ores and use of products of their processing as raw materials for obtaining nuclear materials, defines peculiarities of activity of uranium object, protection of personnel, population and environment from ionizing radiation
- contains norms which define requirements to the employees of uranium objects, as well as to project documentation, operation and stopping of activity of uranium objects
- envisages social protection of the employees who work at uranium objects
- determines basic principles of activity regarding physical protection of nuclear installations, nuclear materials, radioactive waste and other sources of ionizing radiation
- sets that expenditures for physical protection are financed according to the top-priority procedure. Budget funds for financing of physical protection are envisaged by a separate line in the estimates for maintenance of each budget institution and organization that performs activity on physical protection

Law of Ukraine “On the specifics of purchasing irradiated fuel elements (cartridges) for nuclear reactors”
- establishes the specifics of purchasing irradiated fuel elements (cartridges) for nuclear reactors

Law of Ukraine “On Civil Liability for Nuclear Damage and its Financial Provision”
- regulates relations as to civil liability for nuclear damage, establishes the procedure for reimbursement of the damage caused by a nuclear incident, and determines ways of ensuring civil liability and its limits

Financial provision of civil liability for nuclear damage is done by the operator by following ways:
- insurance of civil liability for nuclear damage, which can be inflicted as a result of a nuclear incident;
- receiving other types of financial provision, stipulated by the laws of Ukraine.
Nuclear related laws [cont.]

Law of Ukraine "On Regulation of Issues Related to Ensuring Nuclear Safety"
- determines the legal and organizational principles of financial support for actions aimed at decommissioning and retiring nuclear devices

- establishes the legal principles of treating with depleted nuclear fuel, storing depleted nuclear fuel of VVER type reactors, creating a single system and optimizing the structure for treatment of depleted nuclear fuel of domestic nuclear power plants

The Law of Ukraine “On Protection of People against Ionizing Radiation”
- aims at ensuring the protection of human life, health and property against negative impact of ionizing radiation caused by practical activity, as well as in cases of radiation accidents by undertaking preventive and rescue measures and compensating damages.
- regulates legal relations between the state in the person of its relevant bodies of executive power, legal entities and natural persons, arising with respect to practical activity
- establishes authorities of the Cabinet of Ministers of Ukraine, ministries, other central bodies of executive power, local bodies of executive power with respect to ensuring the protection of humans against the impact of ionizing radiation

The Law establishes general legal principles for making decisions on locating, designing and building nuclear facilities and objects designed for treating radio-active waste that are of national significance.

Nuclear facilities and objects designed for treating radio-active waste that are of national significance shall include:

- nuclear power plants;
- nuclear heating plants;
- nuclear research reactors;
- objects for processing radio-active waste (except for facilities that are included into the technological cycle of a nuclear facility or a storage facility for radio-active waste disposal);
- storage facilities designed for storing spent nuclear fuel or highly radio-active waste with project period of storage exceeding 30 years (except for facilities that are included into the technological cycle of a nuclear facility);
- storage facilities designed for disposal of spent nuclear fuel or radio-active waste.
Draft laws under Parliament’s consideration and supported by the Energy Committee

The Draft Law of Ukraine On Amendments to Article 9 of the Law of Ukraine "On Regulation Nuclear Safety Related Issues" (on allocation of financial fund)

- envisages legal authority for the state-owned nuclear operator to allocate its financial fund. It will solve the problem of protection own financial reserve funds against inflation, as well as meet the requirements of current legislation and international obligations of Ukraine
Draft laws under Parliament’s consideration and supported by the Energy Committee


- envisages counting off the two percent (instead of one as it is now) from sold electricity, produced by nuclear power plants during the reporting period as socio-economic compensation
- envisages provision of health insurance for children, disabled and pensioners covered by the allocation of one percent from sold electricity, produced by nuclear power plants during the reporting period

The Draft Law of Ukraine “On Amendments to Certain Legislative Acts of Ukraine Regarding Regulation of Funding Aimed at Improvement the Safety of Nuclear Installations”

- envisages legal authority for the state-owned operator of nuclear power plants to include in the electricity tariff costs anticipated for the actions within the programs of safety improvement of nuclear facilities and extension lifetime of the existing nuclear installations in the framework of the current legislation
Recently adopted energy laws

- September 2015 - the Verkhovna Rada of Ukraine passed the “Law on the National Energy and Utilities Regulatory Commission of Ukraine.”
  - the Regulator will be politically and financially independent
  - it will be granted full financial independence, including autonomy in setting staff salaries
  - regulator’s decisions will be final and unsubordinated to the President or any other authorities

- September 2015 - the Verkhovna Rada of Ukraine passed in the first reading the “Law of Ukraine on the Electricity Market”
  - it will provide full implementation of the requirements of the Third Energy Package of the EU in terms of legal and organizational unbundling of the distribution and transmission of electricity from other activities as a condition of economic competition in the electricity market (Directive 2009/72/EC and Regulation (EC) 714/2009)
  - new Law envisages the new model of energy market from 2017
  - during the first phase of the new market operation, only thermal, NUCLEAR and dispatchable hydro generating units provide balancing services, referring both to reserves capacity and balancing energy
  - state-owned NUCLEAR and large hydro production is regulated below the market price, allowing for a margin which is used to subsidize electricity production from renewable and gas-fired CHP units and regulated supply of electricity to captive customers
Harmonization of Ukrainian legislation with EU legislation requirements

- According to the Association agreement between the EU and the EuroAtom and their Member States, of the one part, and Ukraine, of the other part, Ukraine undertook commitments to gradually approximate its legislation to the following EU legislation in the nuclear sphere:

  - **Directive 96/29/Euratom** laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionizing radiation
  - **Directive 2006/117/Euratom** on the supervision and control of shipments of radioactive waste and spent fuel
  - **Directive 2003/122/Euratom** on the control of high-activity sealed radioactive sources and orphan sources
Thank You for Your attention!