

**8<sup>th</sup> INPRO Dialogue Forum “Toward Nuclear Energy  
System Sustainability: Economics, Resource  
Availability and Institutional Arrangements”**

**Updates on the current status of the National  
Nuclear Program in Albania**

**Vienna, 26-29 August 2014**

Related to INPRO Methodology\*: “...Experience has shown that establishing and maintaining an adequate nuclear infrastructure requires a significant investment of time and effort – especially for the first nuclear power plant to be installed in a country – and thus may be a potential barrier for starting a Nuclear Power Program.

Within the INPRO Methodology, “...the term **infrastructure** can be defined as *the collection of necessary capabilities of national institutions to achieve long term sustainability of a nuclear power program in a given country...*”.

The INPRO Methodology defines a series of measures to be taken by these national institutions such as: **establishment of a legal framework**, i.e. the nuclear law, and the **corresponding nuclear regulatory bodies**, as well as the **selection of an appropriate site** for nuclear facilities, the **build-up of a national industry** in support of the owner/operator, and **socio-political measures**, i.e. public acceptance, human resources etc..

\* *In all references in the presentation: “INPRO Methodology” stands for “INPRO Methodology for Sustainability Assessment of Nuclear Energy Systems: Infrastructure”; IAEA Nuclear Energy Series No. NG-T-3.12*

If the Nuclear Power Program results a feasible opportunity for the country, then it becomes of a paramount importance to start establishing the specialized institutions.

Taking into account such considerations, the Albanian Government, from 2008 launched the initiative of the Nuclear Power Program. A National Coordinator for the National Nuclear Program has been appointed by the Government.

In 2008, a group of senior representatives from IAEA came in Albania, in a first official mission.

The Albanian institutions started to be organized, based on the IAEA's Milestones concepts (Milestones in the Development of a National Infrastructure for Nuclear Power).

In January 2010, by Decision of the Council of Ministers, the **National Nuclear Agency has been established**. The Agency has, among other institutional obligations, even the responsibility of being, as well, the Nuclear Energy Programme Implementing Organization (NEPIO) for the country.

# Current status of the Nuclear Power Program in Albania

Based on the best experiences of IAEA and single countries, the National Nuclear Agency has been always convinced that:

- A Nuclear Power Program is a multidimensional and multidiscipline long-term commitment for the country, both nationally and internationally.
- The energy planning is of a paramount importance for the success of a nuclear power program, especially if it is the first nuclear project in a country.

All has to start with a long-term study on the energy and electricity demand and supply and the domestic sources of generation, by means of which the demand has to be supported. The long-term domestic grid development, as well as the interconnection links, have to be seriously considered too. The results have to become an integral part of the National Strategy of Energy.

**Why the country needs the nuclear?** To have a chip, clean, sustainable source of electricity generation and to provide for the needed energy portfolio mix.

After the Fukushima accident, in July 2011 the IAEA's DG Amano, has been in Albania, invited by the Prime Minister. The National Nuclear Program was one of the most important topics, discussed during the official meetings. Both the Prime Minister and the IAEA's DG Amano, agreed to consider with attention the worldwide evolution of the nuclear after Fukushima, and to take, in due time, knowledgeable decisions related to the Albanian Nuclear Program. From that time on, we are in a sort of "stand-by status". Meanwhile the National Nuclear Agency continues to fulfill its own institutional obligations, in strong collaboration with IAEA and other international institutions.

A two years National Project with IAEA – TCEU, "Supporting a Safe and Sustainable Electricity Supply" has been activated in 2012 and successfully concluded in 2013. The Final Report has been highly appreciated from the institutions.

In this context, after consultations and agreements with IAEA, the National Project has been reviewed, focusing on the feasibility study of electricity generation sources. Legal and regulatory aspects, as well as sites selection have been postponed, foreseeing another National Project with IAEA TCEU.

# Legal framework

## **INPRO Criteria (CR)1.1: Legal aspects**

**User requirement UR1 (INPRO):** An adequate legal framework should be established to cover the issues of nuclear liability, safety and radiation protection, environmental protection, control of operation, waste management and decommissioning, security, and non-proliferation.

The legal framework comprises two aspects:

- legal requirements set out in nuclear-related legislation, referred to as the nuclear law, and
- related institutional infrastructure, including regulatory authorities, that must give effect to the law and ensure that the legal requirements are met.

**INPRO Acceptance Limits (AL) 1.1:** Legal framework has been established, in accordance with international standards

In Albania: Not yet.

## Legal framework

The National Nuclear Agency, from 2010, started to coordinate institutional meetings and discussions, in the framework of the constitution of Legal and Regulatory frameworks. The given support from the Office of Legal Affairs (OLA - IAEA) has been important. As a good result of collaboration between the IAEA and the National Nuclear Agency, in 2011 the first workshop has been organized in Tirana, with high level representatives from different ministries and specialized institutions in Albania. One of the topics treated and discussed during the workshop, was the establishment of the institutional infrastructure in support of the Nuclear Program and the options to insert that in the legal framework.

In collaboration with OLA and TCEU (IAEA) we have benefited from different participations in workshops, training courses etc., providing added experience and settling useful institutional and human contacts.

## **Meanwhile:**

The Albanian Parliament has ratified the Protocol Additional to the Agreement between the Republic of Albania and the IAEA for the Application of the Safeguards to all Nuclear Activities of Albania (Law n. 10314, date September 09, 2010).

The Albanian National Nuclear Agency has been appointed, by the Albanian Government, as the responsible institution to implement the obligations related to the abovementioned Protocol.

The Albanian Parliament has ratified the Convention on Nuclear Safety, and the Joint Convention on the Safety of Spent Fuel Management and on the Radioactive Waste Management (June 29, 2011).



# Institutions

## **INPRO Criteria (CR)1.2: Institutions**

**INPRO Indicator (IN)1.2:** Status of State organizations with responsibilities for safety and radiation protection, environmental protection, control of operation, waste management and decommissioning, emergency preparedness and response, security, and non-proliferation.

Up to date in Albania are under their full activity:

- The National Nuclear Agency,
- The Institute of Applied Nuclear Physics, which substituted the former Institute of Nuclear Physics,
- The Radiation Protection Commission,
- Other smaller structures under the Ministry of Defense etc..

**INPRO Acceptance Limits (AL) 1.2:** State organizations have been established, in accordance with international standards.

In Albania: Not yet.

## International collaboration end initiatives

An initiative related to a regional project has been launched in 2012 in Tirana and developed latter. A first event, organized by IAEA has been organized last September in Skopje. The project aims to consider different real opportunities of collaboration in the Balkan Region (Albania, Macedonia, Montenegro, Croatia, Kosovo etc..) in the frame of electricity generation, taking into consideration even the nuclear power. The initiative aims to consider, as well, opportunities of having collaboration in the frame of human resources, specialized education etc., related to the nuclear.

From July 2010, an institutional collaboration has been activated between the National Nuclear Agency and the European Commission, through EURATOM.

The National Nuclear Agency has signed Memorandums of Understanding with:

- Slovenian Nuclear Safety Administration (September 2012, IAEA);
- ENEA, the National Agency for New Technologies, Energy and Sustainable Economic Development, Italy (September 2011, IAEA).

Thank you!