

Project INT/4/141: Promoting Technology Development and Application of Future Nuclear Energy Systems in Developing Countries

Workshop on "Defining Coordinated Activities Based on the CUC for Development and Deployment of Nuclear Power Plants for Developing Countries"
IAEA Headquarters, Vienna, Austria, 22-25 September 2008

Summary and Conclusions

Background

The 50th IAEA General Conference resolution (GC(50)/RES/13B) called on interested Member States to develop, under the auspices of the Agency, nuclear power reactors reflecting the needs of the developing States that choose the nuclear option, and in this regard (a) stressed the need to establish, in line with national circumstances, common user criteria for such nuclear power reactors, including infrastructure development requirements, domestic legal and regulatory frameworks, provisions for removal and disposal of the spent fuel, and flexible financing arrangements and (b) recommended that INPRO, subject to the availability of resources, refine such common user criteria in a timely manner.

In response to General Conference resolution GC (50)/RES/13B, in November 2006 it was decided to include within the INPRO programme an activity on "Common User Considerations and Actions for Development and Deployment of Nuclear Energy Systems for Developing Countries", also called the "CUC Activity".

The CUC Activity consists of two stages.

Stage 1, performed in 2007, involved the study of the needs and concerns of developing countries with regard to the development and deployment of new nuclear energy systems. A workshop was organized in November 2007 to gather the input from a large number of developing countries. The conclusions of this study were compiled in the report "Common User Considerations by Developing Countries for Future Nuclear Energy Systems" (the CUC Report), which is currently in the process of being published. Around fifty User countries were identified and thirty five participated in the activity.

Stage 2, defined coordinated activities based on Stage 1 of the CUC Activity that can be carried out individually or jointly by Technology Users and Technology Holders for the development and deployment of new Nuclear Energy Systems. These activities emphasize technology areas, requiring coordination between technology holders and technology users, including the delineation of the steps needed for development and deployment of NES, as well as the associated timelines, resources and interactions. The activities in Stage 2 were performed by the Secretariat and the results were reviewed and agreed upon by a "core team" consisting of a limited number of experts from technology user and technology holder countries that meet periodically. In addition, a second CUC workshop was held on 22-25 September 2008 to provide feedback on the work performed by the Secretariat so far. The results of the activities performed during Stage 2 will be documented in a report.

Both the 2007 and the 2008 CUC workshops were supported by TC Project INT/4/141 on "Status and Prospects of the Development and Applications of Innovative Reactor Concepts for Developing Countries".

Purpose

The objectives of the workshop were the following:

- To present the activities performed during Stage 2 of the CUC Activity to a broader representation of user countries and to obtain general agreement, including:
 - Elaboration of selected requirements by users;
 - Approach to the definition of a generic site;
 - Coordinated activities defined for the development of Nuclear Energy Systems for User countries, focusing on technology areas;
 - Coordinated activities defined for the deployment of Nuclear Energy Systems in User countries, focusing on technology areas;
- To review the comments provided by the workshop participants on the draft CUC Stage 2 Report, and to discuss their integration into the final report;
- To approve the process proposed for the finalization and publication of the report presenting the activities performed in Stage 2 of the CUC Activity;
- To assist workshop participants in the identification of possible strategies to be adopted by their countries to approach technology holders in order to develop and deploy future nuclear energy systems.

Work done

The workshop was attended by 54 participants from 43 countries and 2 international organizations (around 20 of them had also participated in the first CUC workshop in November 2007).

The participants to this 2nd CUC workshop reviewed and discussed the topics refined during Stage 2 (safety regulation and licensing, information on costs, optimization of resources, 'proven-ness' of technology and standardization) and provided recommendations on future possible actions by Technology-Users and Technology-Holders to address them.

The programme of the Workshop was divided in four types of sessions:

- 1) Presentations by the Secretariat summarizing the work done on the Stage 2 of the CUC Activity. These presentations were followed by open discussions where workshop attendees provided feedback on the work performed so far and suggestions to finalize successfully the Stage 2 Report;
- 2) Presentations by several IAEA staff describing several of the current IAEA activities that promote the dialogue between Technology Users and Technology Holders, and how these activities may synergize with the CUC Activity;
- 3) Working group sessions where workshop attendees brainstormed future directions and opportunities to promote the dialogue between Technology Users and Technology Holders, as well as some activities that could be initiated under the umbrella of this forum for dialogue;
- 4) Presentations by Workshop participants, describing their countries' nuclear power programme plans. The following countries made the presentations: Argentina, Armenia, Egypt, France, Indonesia, Jordan, Kazakhstan, Republic of Korea, Lithuania, Malaysia, Mexico, South Africa and Uruguay.

Conclusions and recommendations

The Workshop was conducted successfully. All of the lectures, brainstorming sessions and country presentations presented at the Workshop were well prepared and informative. Participants were actively engaged throughout the Workshop and the discussions were open and lively.

The participants from both Technology User and Technology Holder countries emphasised the benefits of early and quality dialogue and discussed the conditions under which such dialogue and joined actions related to innovative technologies could be continued in synergy with other existing related IAEA activities and international initiatives.

The Workshop agenda and all presentation materials are available at the Workshop website: http://www.iaea.org/INPRO/2008_CUC_Workshop.html

IAEA Division of Nuclear Power <http://www.iaea.org/OurWork/ST/NE/NENP/index.html>