

IAEA

## “Training the trainers” for nuclear infrastructure development

*Representatives from seven nuclear newcomer countries attended a course at Argonne National Laboratory on developing a nuclear workforce training program.*

A three-week course, “IAEA Training Course to Develop Member State Programs on the Competencies Needed for a Nuclear Power Program,” was conducted March 5–23 at Argonne National Laboratory (ANL). Designed to help nuclear newcomer countries develop safe and sustainable nuclear power programs, the course was attended by 17 participants from Bangladesh, Egypt, Jordan, Kenya, Nigeria, Poland, and Turkey. The International Atomic Energy Agency organized the course to “train the trainers” and provide them with the tools

to develop national training programs to build the necessary skills and capabilities for nuclear infrastructure development, according to the IAEA.

The seven countries represented at the course are all in Phase 2 or 3 of the IAEA’s milestones approach to developing a nuclear power program, which means that their governments have committed to including nuclear power in their energy mix and are now preparing for contracting and construction, or have started construction, of their first nuclear power plant. Each course participant represent-



Photo: ANL

Group exercises were part of the IAEA training course.

ed one of three key organization types: governments or national nuclear energy program implementing organizations (NEPIO), regulatory bodies, or future owner/operators.

IAEA and international experts, as well as management and technical specialists from ANL and the U.S. nuclear community, delivered the lectures, coordinated exercises and group activities, and shared their teaching materials with the participants.

“The objective of this training course was to develop dedicated teams of instructors in member states and help them plan tailor-made training programs in their respective countries,” said Sean Dunlop, a member of the IAEA Nuclear Infrastructure Development Section, who was one of the lecturers. “They are also expected to implement at least one training activity in their home countries within six months after completion of the course.”

The course focused on unique aspects of a nuclear power project, including nuclear safety, security, and safeguards; interna-

tional legal instruments; a comprehensive nuclear law and a regulatory framework; financing and government involvement; and the need to accumulate funds for decommissioning and radioactive waste management. The course also introduced the IAEA’s milestones approach to developing and implementing a nuclear power program, the competencies required of each organization during each phase of development, and the importance of encouraging staff to think critically and holistically.

During the first week of the course, the role of the government and the coordinating functions of an NEPIO were emphasized. The second week focused on the development of the nuclear regulatory body, the licensing process, and construction oversight. During the third week, the responsibilities of the owner/operator of the nuclear power plant, such as ownership options, bidding and contract negotiations, and plant siting, were discussed. The importance of engagement with all stakeholders and public communication was addressed for all three organization types.

Katarzyna Kaminska, a participant from Poland’s Ministry of Energy, said, “This training course helped me to take a comprehensive look at the roles of my organization, the regulatory body, and the owner/operator throughout the nuclear power program. I will be able to improve my cooperation with both my NEPIO colleagues and other organizations involved in the program.”

Tahreer Al-Qaq, from Jordan’s Energy and Minerals Regulatory Commission, said, “I found most useful that this course was interactive, with realistic examples, and that we had an opportunity to share experiences with people from other countries.”

The training course was organized within the IAEA Technical Cooperation Project “Supporting Knowledgeable Decision-making and Building Capacities to Start and Implement Nuclear Power Programs” and was funded by a U.S. contribution to the IAEA’s Peaceful Uses Initiative.