by Rafael Martincic and Lisa Obreniz 13 – hour

Lessons were learnt from a large-scale nuclear international readiness.

is five o'clock in the morning at Laguna Verde Nuclear Power Plant on Mexico's East Coast. A fire is detected in the service water pump room driving the plant operator to decrease power at the plant. Due to further deterioration of the conditions at the plant the IAEA's Incident and Emergency Centre (IEC) receives notification from Mexican authorities of a "site area emergency" and the IEC begins to assess the situation.

Thankfully, on this day in July 2008, the IEC is responding to an international emergency exercise, also known as ConvEx-3 (Convention Exercise), designed to test and evaluate the exchange of information, coordination of assistance and harmonization of the information for the public on an international scale. More messages arrive at the IEC via the official and secure Early. Notification and Assistance Conventions (ENAC) website. There are casualties and signs the situation will continue to deteriorate at Laguna Verde and the IEC moves toward full activation. IAEA staff who are part of the Agency's Incident and Emergency System (IES) are called in to the Centre. Before long, almost two dozen staff members from various divisions are hard at work analyzing data, communicating with the 'Accident State', Member States and relevant international organizations, and responding to press enquiries. They will rotate and continue to work tirelessly for the next 43 hours – the duration of the exercise.

The goals of the exercise were three-fold:

The IAEA Incident and Emergency Centre (IEC) during the ConvEx-3 exercise. In total, 75 Member States and ten international organizations participated, substantially more than in 2005 when the last ConvEx-3 took place in Romania. The scenario was prepared by the Laguna Verde nuclear power plant, the National Nuclear Safety and Safeguards Commission (CNSNS) and the Inter-Agency Committee for Response to Nuclear Accidents (IACRNA).

(Credit: D.Calma/IAEA)



Global Drill emergency exercise held in July that tested

• to test the response of Member States and relevant international organizations in a severe nuclear accident;

to test and evaluate the international emergency management system [e.g. current Emergency Notification and Assistance Technical Operations Manual (ENATOM) arrangements];

• to identify good practices as well as deficiencies and areas requiring improvement that cannot be identified in national exercises.

The exercise scenario was based on a severe nuclear accident with serious transnational implications: "actual" for few States, "potential" for some and "perceived" for many. In total, 75 Member States and ten international organizations participated, substantially more than in 2005 when the last ConvEx-3 took place in Romania. The scenario was prepared by the Laguna Verde nuclear power plant, the National Nuclear Safety and Safeguards Commission (CNSNS) and the Inter-Agency Committee for Response to Nuclear Accidents (IACRNA) working group on coordinated international exercise.

Prior to the exercise, many staff received special training in response to radiation incidents or emergencies. Members of the IES served several functions such as: liaison officers, public information officers, emergency response managers, logistics officers, technical specialists, communication specialists, etc.

Testing preparedness and response skills is key to gauging how ready the Agency and international community are to face events with consequences of "the big accident." Exercises identify weaknesses in the international emergency response system at least in regard to nuclear safety concerns and give the opportunity to improve response preparedness. The next step will be to practice responding to emergencies that have a security component, such as a terrorist attack, in light of the changing nature

Practice Makes Perfect

Every few years, IACRNA, whose purpose is to coordinate the actions of relevant international organizations in the case of a radiological emergency, works in conjunction with other States and organizations to test global emergency preparedness.

The previous such event took place in May 2005 at the Cernavoda nuclear power plant in Romania and was viewed as a success.

of the world's emerging security threats. The frequency of exercises, currently held every three to five years, will also increase in order to increase testing and thus enhance the emergency response systems.

The observations, evaluations, and conclusions that emerge from the exercise will be included in a report summarizing the major findings on the simulation and providing insight into possible shortcomings in national and international response systems. In the meantime, the IEC returns to "ready" mode, better prepared for the worst-case scenario.

Rafael Martincic is a nuclear safety consultant. E-mail: R.Martincic@iaea.org. Lisa Obrentz is Action Plan Outreach Officer at the IEC. E-mail: L.Oberntz@iaea.org.