

2nd National Training Course on “Physical Protection of Nuclear Material and Nuclear Facilities”, 24 to 28 March, 2014 Mumbai, India

The 2nd National Training Course (NTC-2014) on Physical Protection of Nuclear Material and Nuclear Facilities for security personnel was jointly organized by GCNEP and BARC, at Niyamak Bhavan, Anushaktinagar, Mumbai during 24th – 28th March 2014.

The objective of the training course was to provide participants with the general understanding of Physical protection of Nuclear Material and Nuclear Facilities against theft and sabotage. It also aimed at providing information on state of the art in electronic security systems and their applications in the nuclear security.

The training course was attended by 51 participants -20 departmental security officers from different DAE units and 31 CISF personnel deployed at different DAE units including research centers like BARC, IGCAR, VECC, RRCAT etc., nuclear power plants (NPP), multi-facility sites like Rawatbhata and Tarapur etc.



A total of 20 faculty members were involved for deliberation of different lectures, carrying out exercise, conducting quiz etc. Faculties were drawn from BARC, DAE, NPCIL, IGCAR, AERB and NRB, CISF. The training course was specially designed and compiled to meet the requirements of the security personnel.

The course was arranged with 14 lecture sessions, 5 special lectures, 3 quiz & video sessions, 1 workgroup exercise and a field visit for security gadgets demonstration. The training course was compiled to cover wide ranging topics on Defining, Designing and Evaluation of Physical protection system for nuclear material and nuclear facilities. One group exercise was done for design & evaluation of physical protection system on a hypothetical facility.



One half day technical visit to BARC was organized for all the participants to demonstrate the working of various security systems. The participants were briefed about the working principal and operating procedures of the different security system. Participants were also taken to ERC (Emergency Response Centre), Mod Lab to provide them knowledge of various radiation detector and emergency response activities.

The training course concluded on 28th March afternoon with a panel discussion and feedback session. Certificates were distributed to all participants by Dr. K L RamaKumar, Director, RC & I Group, BARC, Head NCPW, DAE.

Printed training course material in two volumes, giving presentation view graphs and the lecture text, a booklet providing the design and evaluation process of a hypothetical facility were prepared. A Training course DVD containing all the presentations and texts and other essential nuclear security information was also developed. Training course material kit containing all the above material (i.e. two printed volumes of the training course material, a workgroup booklet, a DVD) was distributed to all participants and faculties.

Most of the participants gave the feedback that the training course will be very useful for their future work and overall the program was very valuable to them. Demonstration of security gadgets was highly appreciated by all participants. Considering the requirement for knowledge up-gradation and constant up-gradation in the security systems and gadgets, this training course on physical protection of nuclear material and nuclear facilities, exclusively for security personnel, will be conducted every year.