

TAFICS Theme Meeting on I&C SECURITY PROGRAM FOR NUCLEAR FACILITIES

Task Force for Instrumentation & Control (I&C) Security (TAFICS), a DAE level task force organised a Theme Meeting on “I&C Security Program For Nuclear Facilities”, 1-2 April, 2016 at BARC. The meeting was supported by BRNS. I&C security deals with protecting computer-based I&C systems from cyber attacks. The objective of the meeting was to elucidate all stake holders of I&C security – CISOs, ISOs, designers, O&M personnel, senior management - of various DAE units: the purpose, scope and technical details of the I&C security program; the methodology for adapting the security plan and controls for a specific nuclear facility; and expected deliverables of the I&C security program.

The two-day theme meeting was attended by about 125 participants from all over DAE: BARC, NPCIL, IGCAR, AERB, BHAVINI, HWB, NFC, DAE HQ and ECIL.

Shri R.M. Suresh babu, Head EISD, BARC and Convener, TAFICS explained the difference between I&C security and IT security and about the future endeavours of TAFICS. Shri G.P. Srivastava, former Director, E&I Group, BARC described how the physical and computer security issues and solutions have evolved in DAE for the last two to three decades. Shri S.A. Bhardwaj, Chairman, AERB appreciated the work done by TAFICS and said that AERB will develop regulatory documents that deal with I&C security. He also brought out the need to evolve methodology for qualification of commercial off-the shelf (COTS) systems, which are extensively used, particularly in imported reactors. Delivering the Guest of Honour lecture, Dr. Anil Kakodkar emphasised

that I&C security is an important topic and is very dynamic, which requires that the technology used should continuously be updated to keep us ahead of the adversaries. He also advised to develop more in-house products for critical applications and that DAE should make necessary human resources available to TAFICS to carry out the important tasks. The Chief Guest, Dr. R. Chidambaram called up to create a trustworthy cyber eco-system. He also said that there is security in isolation and this should be borne in mind while designing critical computer systems. He advised TAFICS to interact with critical infrastructure security forums to understand the emerging threat vectors and vulnerabilities of computer systems. Dr. R. Chidambaram released the second implementation guide published by TAFICS, titled “I&C Security Program for Nuclear Facilities”.



Panel Discussion : Shri K.K.M. Haneef, Shri Bharath Kumar, Shri R.K. Patil, Shri G.P. Srivastava, Shri B.B. Biswas, Shri R.S. Mundada, Shri R.M. Suresh babu



Release of TAFICS Implementation Guide. Shri S.A. Bhardwaj, Dr Anil Kakodkar, Dr R. Chidambaram, Shri G.P. Srivastava, Shri R.M. Suresh babu

View of audience



Following the inaugural session, there were six sessions, in which nineteen experts in this field delivered talks on all aspects of I&C security. The topics included: I&C security plan, I&C security controls, safety-security interface, security issues during design and implementation, hardware Trojans, COTS systems security issues, cyber DBT, risk assessment and procurement & supply chain issues. One session was dedicated to talks on security-sensitive products that are developed in-house – which can be used by the users

across DAE units - and product endorsement scheme of TAFICS.

The theme meeting had a panel discussion chaired by Shri G.P. Srivastava that brought forth a number of questions from audience related to I&C security implementation. The meeting ended with a note that it was very information and educative and using the guide published by TAFICS, all relevant DAE units should strive towards building a robust defence for I&C security.