

INFRASTRUCTURE AND HUMAN RESOURCE DEVELOPMENT

Initial Years

A.K. De on his appointment as first Chairman of AERB in 1984 was given office in Old Yacht Club (OYC) building while the office of P.N.Krishnamoorthy, Member Secretary was located in the Annexe Building of Central Complex, Bhabha Atomic Research Centre. By the end of 1984, the total staff of AERB was nearly twenty-five with ten scientific, four technical, nine administrative and two auxiliary staff. The 2nd floor in OYC building was converted as the first formal office of AERB occupying an area of about 340 square metres. One side of the wing was made into cabins for the officers and the other side was made into cubicles to be allotted to the other administrative and technical staff. Soon, a library was also added to acquire technical books and journals. In 1986 AERB got its very first mini computer SN-23 to be followed by two more desktop computers. These computers were essentially used for analytical work related to reactor safety and data processing.

With the construction of Vikram Sarabhai Bhavan at Anushaktinagar in 1988, AERB secured part of its North Wing in the 4th Floor to meet the requirements of its expanding strength. S.D.Soman, who took over from A.K.De as Chairman AERB in 1990, moved to his office in this wing. AERB grew at a very rapid rate from 1992 to 1996 reaching a total staff strength of 113 by 1996 with 70 Scientific Officers and 17 Technical, 19 Administration and 7 Auxiliary staffs.

Niyamak Bhavan

During the tenure of S.D. Soman, action was initiated for construction of a new AERB Building at Anushaktinagar which had

an area of 4500 square metre. Later A. Gopalakrishnan, who was the Chairman AERB following S.D. Soman along with S.V. Kumar, guided the establishment of necessary infrastructure in the new building. The AERB Building named as Niyamak Bhavan was inaugurated by R. Chidambaram, the then Chairman, Atomic Energy Commission on August 2, 1996 when S.V. Kumar was the officiating Chairman of AERB.

In keeping pace with the fast expansion of DAE programme, AERB had to augment its manpower. There was also shortage of meeting rooms in the Niyamak Bhavan. Therefore an additional building was constructed near the existing Niyamak Bhavan building. The new building was inaugurated by A. K. De in November 2007 to mark the commencement of AERB silver jubilee year. Both the buildings are identical in external appearance and have similar floor areas. The old building was renamed as Niyamak Bhavan-A and the new building was named as Niyamak Bhavan-B.

The library at Niyamak Bhavan today has nearly 8000 books in its hold and subscribes to 25 national and international journals. It uses the library management software (Libsys-4) and is a part of the DAE internet library network. The buildings are equipped with state-of-art internet and intranet facility. In addition to the Board room, there is one auditorium, one lecture hall, one conference room and eight meeting rooms in the building complex.

Safety Research Institute

AERB established its Safety Research Institute (SRI) in 1999 at Kalpakkam in the IGCAR complex. It moved to its own building in 2003 which has an office area of 2300 square metres. SRI also has a guest house in Anupuram which can host 60 guests. A seminar hall is also a part of the guest house which is frequently used for organization of scientific meetings, seminars, workshops, etc.

Regional Centres of AERB

Action has been initiated under the XIth plan to establish two regional centres of AERB, one in Kolkata and another at Anupuram near SRI to cater to the need for conducting regulatory work in the eastern and southern regions of the country in a more efficient and expeditious manner.

Development of Human Resource

There has been considerable amount of emphasis on the Human Resource Development (HRD) in AERB right from its inception. The main emphasis has been on maintaining adequate and competent manpower. Appropriate recruitment policy to induct talented manpower, organization of appropriate training of staff and knowledge management towards maintaining competence and efficiency in the organization have been the main feature of HRD in AERB.

Manpower Induction

A mixed approach of induction of manpower depending on the need and expertise required in AERB, is being followed by AERB. The fresh graduates (scientists and engineers) are taken from the Training Schools of Human Resource Development Division (HRDD), Bhabha Atomic Research Centre (BARC) Mumbai and its affiliated training schools at Indira Gandhi Centre for Atomic Research (IGCAR) Kalpakkam, Nuclear Fuel Complex (NFC) Hyderabad and Nuclear Power Corporation of India Limited (NPCIL) Mumbai. These scientists and engineers join AERB after undergoing the Orientation Course for Engineering graduates and Science postgraduates (OCES). The direct recruitments are done from nuclear and other industries through the normal process of advertising the posts in national newspapers and on AERB website, shortlisting the candidates by screening and then conducting the personal interviews. The post graduate engineers/scientists and the ones with experience in relevant industries and/or in research organizations are selected for induction at lower middle

level. Students with B. Tech. degree are sponsored for M. Tech. in I.I.T Bombay at Mumbai and I.I.T Madras at Chennai. These students join AERB after completing their post graduation. In addition, personnel from DRP and Health Physics training courses are also inducted in AERB. Certain posts, particularly at higher levels, are filled by transfer of competent staff with required expertise from various DAE organizations like BARC, IGCAR, NPCIL and IREL. AERB presently has 171 scientific and secretarial staff and another 40 staff in administration and accounts. A total of 101 scientific staff were inducted in AERB during the last 12 years through various induction modes described above.

Training

AERB organizes In-house Orientation Training Programs for newly inducted staff. This program covers the entire knowledge canvas of AERB such as the legislative (Acts), legal (Rules) and regulatory (codes, guides and manuals) framework, functioning of AERB, regulatory processes followed and basic aspects of nuclear, radiation and industrial safety in nuclear and radiation facilities. Those who join AERB after completing the AERB sponsored M. Tech. program, undergo Orientation Course for DAE Graduate Fellowship Scheme (DGFS) of BARC Training school. In addition, the staff undergoes On the Job Training (OJT) at Nuclear Training Centers of NPCIL and at other nuclear facilities. Regular staff are also deputed to the Continued Education Program of BARC training school. Refresher courses are conducted in-house on various topics of regulatory and safety aspects. AERB colloquia are organised frequently on topics of current interests and on new developments in various fields. The staff is provided opportunity to participate in Conferences, Seminars and Workshops in India as well as abroad to keep them abreast of the new developments in the areas of relevance. In addition, seminars/talks are arranged by the respective divisions to encourage more and more interaction with the members of other divisions. The staff are encouraged to improve their educational qualifications and

those with Ph.D. degrees are encouraged to do post-doctoral work in reputed Universities/ Institutes with renowned professors in advanced countries. In the recent past, AERB has also deputed some of its employees to reputed institutes abroad for advanced training. Senior staff are encouraged to teach in training schools of different units in DAE and educational institutes like universities and IITs.

Knowledge Management

AERB library subscribes to different types of journals, books, reports, etc. After the advent of Information Technology, the journals and other information sources are stored in the electronic form. The international collaborative efforts have also been very useful in knowledge capture and in gaining insights into the regulatory process of other countries and emerging methods of regulatory decision making.

Important documents of AERB related to legislative, legal and regulatory framework, regulatory and safety documents, inspection and enforcement reports, minutes of safety committee meetings are preserved in hard copy form as also in electronic forms in library and in individual divisions. A Knowledge Portal has been opened in the LAN of AERB to make the documents easily accessible and retrievable. The tacit knowledge of individuals is best utilized through participation in the meetings, seminars and workshops. AERB extensively uses retired experts in its regulatory review and regulatory documents development process to benefit from their long experience and wisdom.

Public Information

One of the important functions of AERB is to “take such steps as necessary to keep the public informed on major issues of radiological safety significance.” Right from its inception, AERB took many steps to carry out this function. Since 1985, AERB has been bringing

out periodically newsletters covering national and international news related to safety regulation. . Annual Reports of AERB brings out details of the work carried out in various divisions, reports on unusual occurrences in nuclear and radiation facilities, international cooperation, etc. The newsletter and the annual reports are widely circulated to all the units of public sector undertaking under DAE, Regulatory Bodies of other countries, IAEA, premier educational and research institutes in India, Radiological Safety Officers of various hospitals and nuclear installations and news agencies in India.

AERB has often used electronic and print media to keep the public informed about important regulatory activity. In addition AERB maintains a website which is a reliable source of information for the licensees and the public.

ISO Certification

AERB places high emphasis on quality in its regulatory and safety enforcement functions. Towards this end necessary systems have been put in place and AERB obtained ISO 9001:2000 certification for its Quality Management Systems related to the processes for consenting, regulatory inspections and development of regulatory documents in November 2006. AERB is the first technical regulatory body in the country to have received ISO certification.

Major inputs by: *O.P. Singh, P.C. Basu, S.E. Kannan, P. Shylamoni, R.J. Palamattam, C. Senthilkumar, E.R. Titto and Kavi Upreti*