



CHAPTER -11

HUMAN RESOURCES DEVELOPMENT AND INFRASTRUCTURE



HUMAN RESOURCES DEVELOPMENT AND INFRASTRUCTURE

Human resource in AERB is being augmented at various levels and through various channels in view of the expanding nuclear power programme and increasing number of radiation facilities in the country. This is being carried out through induction of Graduate Trainees from Orientation Course for Engineering Graduates and Science Post Graduates (OCES) of DAE units and induction of postgraduates through AERB Graduate Fellowship Scheme (AGFS) from IITs, direct recruitment, lateral transfer of experienced personnel from operating plants and R&D institutes of DAE and transfer from non-DAE units.

The human resources and their management, development and infrastructure are further described in this chapter.

11.0 Enhancing Organisation Excellence

The allocation of responsibilities and authorities to different levels in the organisation for discharge of the functions is contained in Integrated Management System (IMS) adopted by AERB. While, this provides the required accountability in the system, for achieving excellence in work environment, it is also crucial to have the 'Right person for the Right Job'. Recognising that AERB's greatest asset are its employee and workplace excellence of an organisation is directly proportional to the extent the organization engages with its employees, AERB conducted two opinion surveys within the organisation with participation of all its employees. For unbiased and fair opinions, the surveys were kept anonymous.

11.0.1 Right Person For The Right Job

The first survey was an attempt to elicit views/opinion of employees of AERB on eligibility cum selection criteria for choosing the 'right person' for heading a Division/Directorate in AERB. About 80% of scientific and technical staff participated in the survey. 97% of the participants responded in affirmative on the need to have criteria for the post of Head of Division in AERB. The factors considered for deciding eligibility criteria (to have a panel) were overall grade seniority and technical competency. Employee were asked to provide weightage for these on a scale of 1 to 5 (5 being highest). Opinion were sought to provide weightage for these factors. The factors for deciding selection criteria for the candidates in the zone of consideration were knowledge and understanding of management & regulatory processes, leadership qualities (interpersonal skills), ability to mentor and assess the subordinates, ability to formulate the long-term strategies, ability to prioritize and organize the work plan and knowledge about administrative aspects.

11.0.2 Organisation Climate

With regard to the second survey, the guiding factor was to have an overall assessment of workplace climate for which workplace satisfaction is a key element. Opinion were sought to provide weightage for these factors. Individuals in key positions can positively influence the work environment. How employees feel about the organisation is in direct co-relation to the quality of the superiors whom they report. For this purpose, an employee opinion survey was designed to

elicit feedback on the attributes the employee thinks are important towards assessment of their superiors, namely the immediate superior, Section Head and Division Head. Eleven leadership attributes were identified for the survey such as leading by example, trustworthiness, accessibility, mentoring abilities, etc. About 75- 80% of the participants were mostly satisfied with immediate superiors, Section Heads and Division Heads.

Results of both the survey were shared with the employees and presented to the Board and are being formalised in IMS for implementation.

11.1 Human Resource

The total sanctioned strength of AERB is 459, and the manpower strength as of December 31, 2023, is 361. This year, 10 officials joined, while 17 officials retired/transferred/ resigned from AERB. The manpower is being augmented through induction of Graduate Trainees from Orientation Course for Engineering Graduates and Science Post Graduates (OCES) of DAE units and direct recruitment mode.

11.2 Employment of Persons with Disabilities

Persons with Disabilities (equal opportunities, protection of rights and full participation) Act, 1995 and implementation of reservation policy for Scheduled Castes / Scheduled Tribes / Other Backward Class (OBC) is implemented in AERB. Rosters are maintained as per the orders on the subject. The backlog vacancies are worked out and periodic reports and returns are sent to DAE.

11.3 Integrated Management System

AERB has developed and implemented Integrated Management System (IMS), in line with IAEA Safety Standards titled Leadership and Management for Safety (No. GSR Part -2, 2016). The documents

are categorised as Level-1, 2&3. While Level-1 is the topmost document which contains the delegation of decision making authority and the policy statements, Level-2 provides the strategies and strategic directions to implement the policy and the process descriptions including the interfaces while Level-3 is the lowest set of documents containing the work plans, checklists, procedures, etc.

Currently, IMS Level-1 document is being revised to align it with the provisions of IAEA's GSG 12 document with a view to bring in better clarity and to give necessary flexibility to cater to anticipated circumstances and demands.

As IMS concerns all the employees in AERB, the revision of the document is being taken up in an inclusive manner with participation of all. A dedicated web space in AERB's intranet portal was created for obtaining comments. The revision work of IMS level document is in progress.

11.4 Training

As part of competence development, AERB continues to train its staff by organizing orientation training courses, On-the-Job Training (OJT) at nuclear and radiation facilities, periodic refresher training courses, workshops, seminars/ webinars, technical talks, colloquia and participation in national and international programmes. AERB also provides internship training to the students of various academic institutes.

11.4.1 Orientation Training Programme for New Recruits

Orientation Training for 16 newly joined Scientific & Technical Staff was conducted during May 22 to June 29, 2023. The training consisted of physical and recorded video lectures.

11.4.2 On-the-Job Training (OJT)

In year 2023, On-the-Job Training was continued for 10 AERB officials at NPP sites viz. RAPS & KAPS to get hands-on experience.

11.4.3 Internships

AERB provided internships to more than 35 students from academic institutes during this year.

11.5 Training on Communication at IIMC, Delhi

A training program on Communication was arranged for AERB officials at Indian Institute of Mass Communication (IIMC), New Delhi in July 2023. Fourteen AERB officials participated in the training programme. The training programme covered topics like Media Landscape in the Country, Social Media Ecosystem, Crisis Communication, Conducting a Press Conference and Elements of Press Release.



AERB Participation at IIMC, New Delhi

11.6 Knowledge Management

11.6.1 AERB Colloquium / Technical Talk

AERB conducts technical talks/colloquia for its staff for knowledge up-gradation. The topics are chosen in line with the mandate and functioning of AERB, covering latest scientific and technical development worldwide in the field of nuclear and radiation industries, regulatory practices and aspects enhancing personal and interpersonal effectiveness etc.

The talks/colloquia were organized on the following topics

- i. Management of Radioactive Waste generated at Fukushima Site
- ii. Radiation Protection aspects during Decontamination & Decommissioning of Nuclear Facilities
- iii. Management of Radioactive Waste generated at Fukushima Site
- iv. Fundamentals of Nuclear Security and Regulations pertaining to Security of Nuclear and Radiation Facilities
- v. Leave Travel Concession and Travelling Allowance
- vi. Children Education Allowance & Hostel Subsidy
- vii. Challenges in Construction Industry
- viii. Robots in Industry and Healthcare
- ix. Inner Cleansing and Redesigning Self

11.6.2 Management Development Programme (MDP)

A five day Residential Training on 'Management Development Programme (MDP)' was arranged at Yashwantrao Chavan Academy of Development Administration (YASHADA), Pune in August, 2023. Twenty nine AERB officials attended the programme.



MDP at YASHADA, Pune

11.6.3 Knowledge Management Portal

A dedicated Knowledge Management System (KMS) have been set up to disseminate the available knowledge base and further augment knowledge base to meet the challenges of the future. The 'Knowledge Management System' is functional on the internal website of AERB, as part of knowledge preservation and easy retrieval of information. Training/ Refresher course/Teaching material, proceedings of Conferences and Seminars, etc. were uploaded on the portal at regular intervals. AERB regulatory documents viz. Codes/Standards/Guides/Manuals have also been uploaded on the portal.

11.6.4 Scientific Information Cell

A well-equipped scientific information cell (Library) has been maintained at AERB. 31 publications were uploaded in Knowledge Management System (KMS). 27 new books were added to the library. The total collection of publications in library is 10,721. In addition, 7 Journals and 1 Database were subscribed during the period. World Nuclear News, IAEA Weekly News, NEA News Bulletin etc., are circulated in digital form regularly through e-mails to AERB staff.

11.6.5 Promotion of Excellence in Human Resources

The following officers have successfully completed their PhD with Homi Bhabha National Institute (HBNI):

- Shri Arun Aravind, SO/F completed PhD on "Observational and Numerical Modelling Studies of Atmospheric Flow and Dispersion of Air-borne Releases over Kaiga Complex Terrain Site".
- Shri Ramakrishna Pagoti, SO/F completed PhD on "Luminescence Properties of Lanthanide and Actinide Doped Borophosphate Glasses".

11.7 Seminar on "Role of Nuclear Energy in the Decarbonising World"

As a part of Azadi Ka Amrit Mahotsav (AKAM) celebrations, a seminar on "Role of Nuclear Energy in the Decarbonising World" was conducted on January 24, 2023. Shri S.A. Bhardwaj, former Chairman, AERB and Dr. R.B Grover, Emeritus Professor, HBNI and Member, Atomic Energy Commission were the distinguished speakers for the seminar. Shri Bhardwaj spoke on the emerging nuclear technologies while Dr. Grover highlighted



Shri S.A. Bhardwaj, Former Chairman, AERB delivering Talk during Seminar

the role of nuclear energy in the country's energy mix. Around 150 delegates participated in the seminar.



Dr. Grover delivering Talk during Seminar



Dignitaries and Participants attending the Seminar

11.8 Infrastructure Development

11.8.1 New Office Building

The construction of new office building has been completed and process of obtaining occupancy certificate through local authorities is in progress. As a part of green energy initiative, AERB had installed 25 kWH solar power roof top panels in its complex, which generated a total of 33,098 units this year.



New Office Building - Niyamak Bhavan- C

11.8.2 Construction of SRI Engineering Hall (Phase-II)

Engineering Hall-II is being setup to augment the existing experimental infrastructure at SRI. It is envisaged that around six new experimental facilities can be built within Hall-II. This infrastructure will cater to the long-term in-house

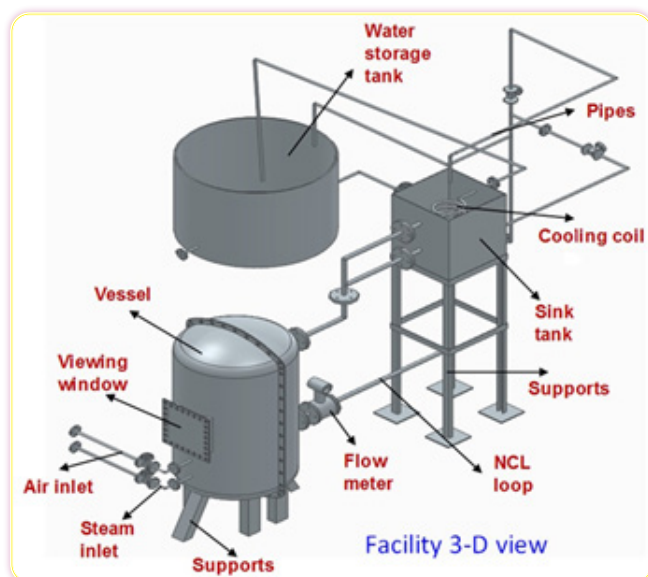


Engineering Hall-II

R&D programs of AERB to address regulatory safety issues and performance assessment of FOAK systems.

11.8.3 Setting up of PCCS Facility

Passive Containment Cooling Systems (PCCS) are being extensively used in the new generation reactors to mitigate the consequences of severe



Schematic of the Experimental Setup

accidents. The regulatory review of such FOAK passive safety systems where the driving forces are minimal, poses a challenge. In view of the above, it is planned to set up a versatile PCCS facility in the SRI engineering hall. The objective of this facility is to investigate the performance of two-phase, parallel channel natural circulation PCCS loops under low thermal driving force. The design of the facility has been completed. The fabrication of the facility components has commenced and nearing completion. Figure shows a schematic of the proposed setup.

11.9 Appointments and Retirements

Manpower of AERB is being augmented at different levels and through various channels in view of the expanding Nuclear Power Programme and an increasing number of Radiation Facilities in the country. The status of manpower for the year is as follows:

Table 11.1 Employees Joined AERB

S. No.	Name	Designation	Date of Joining
1	Shri Pushpendra Singh	Technical Officer- D	16-01-2023
2	Shri Ujwal Narjinary	Upper Division Clerk	27-01-2023
3	Shri Rahul Mishra	Technical Officer- D	27/03/2023
4	Shri Ashok B. Gerira	Chief Administrative Officer	10-04-2023
5	Smt. Sujata S. Nair	Principal Private Secretary	20-04-2023
6	Smt. Siji Menon	Assistant	23-06-2023
7	Shri Alok Kumar	Scientific Officer - C	01-08-2023
8	Shri Manoj M. Jagasia	Chief Administrative Officer	08-09-2023
9	Shri Suman Kumar	Scientific Assistant - D	11-12-2023
10	Shri Kapil Deo Singh	Scientific Officer - G	29-12-2023

Table 11.2 Employees Retired/Transferred/Resigned from AERB

S. No.	Name	Designation	Date
1	Smt. Suchita Modi	Upper Division Clerk	02-01-2023
2	Shri R. U. Parmar	Scientific Officer - H	31/01/2023
3	Shri Abhinav Kumar	Scientific Officer - E	24/03/2023
4	Shri K. Venkat Subramanian	Chief Administrative Officer	10-04-2023
5	Shri R. J. Palamattam	Sr. Principal Private Secretary	18-04-2023
6	Shri V. Srinivasan	Assistant	30-04-2023
7	Smt. Pratibha Shelar	Assistant	30-04-2023
8	Dr. (Smt.) Shylamoni P.*	Scientific Officer - G	16-05-2023
9	Shri E.R. Titto	Scientific Officer - G	31-05-2023
10	Shri Pushpendra Singh	Technical Officer - D	26-05-2023
11	Shri Subhash M. Kodolkar	Scientific Officer - E	31-07-2023
12	Smt. Siji Menon	Assistant	30-08-2023
13	Shri Ashok Gerira	Chief Administrative Officer	13-09-2023
14	Shri Nikhil H	Scientific Officer - E	15-09-2023
15	Shri Kaushik Ghoshal	Scientific Officer - F	31-10-2023
16	Smt. Pushpa Wakte	Assistant	06-11-2023
17	Shri Mohammed Chand Pasha	Scientific Assistant - D	08-12-2023

* Demise

