

www.aerb.gov.in

April-June 2019

# AERB

# e-Newsletter

# **Atomic Energy Regulatory Board**



The mission of the AERB is to ensure that the use of ionising radiation and nuclear energy in India does not cause undue risk to health of people and the environment

# In this Issue

From the Chairman's Desk	2
Safety Review and Regulation	4
Initiatives towards Minimum Government and Maximum Governance	5
International Cooperation	5
Public Outreach and Stakeholders Engagement	7
Human Resources Development	9
Official Language Implementation	12
Celebration of World Environment Day	12
Celebration of International Yoga Day	15
Recruitment / Retirement	16
Feedback	18



### From the Chairman's Desk



In recent months, nature's fury through the cyclone 'Phani' in the east coast and concerns of delayed monsoon have been drawing our attention about the changing climatic pattern, being experienced all around the world, including India. As part of AERB commitment towards clean environment, AERB organized a seminar on 'Environment and Radiation' in Rajbhasha Hindi on the eve of World Environment Day observed on 5<sup>th</sup> June, 2019. This was followed by plantation of tree saplings by the staff of AERB.

AERB actively participated in the National Technology Day celebrations held on May 11 to commemorate the significant technological milestones achieved by India. An exhibition showcasing the achievements of DAE was organised in Anushaktinagar, Mumbai. AERB staff displayed exhibits and posters highlighting the safety aspects in production of nuclear energy as well as in the multifarious applications of radiation sources for societal benefits in the country.

On the work front, after completion of EMCCR activities and satisfactory review and approval by AERB, KAPS-1 was restarted and synchronized to the grid on May 24, 2019. In the last quarter more than 5000 licenses were issued covering various applications of radiation in medicine and industry. AERB has also initiated coordination with Directorate General of Health Services, Govt. of India to discuss strategies and mechanisms for effective regulation of Clinical Establishments using medical devices emitting ionizing radiation. I take this opportunity to share that our sustained and continuous efforts, through a multipronged approach, to bring the diagnostic X-ray facility under regulatory umbrella have been vindicated by the order of National Human Rights Commission while disposing off a petition.

As part of ongoing international cooperation activities, a three member delegation from U.S. Consulate visited AERB to discuss matters related to nuclear regulatory collaboration. Chairman, Bangladesh Atomic Energy Regulatory Authority (BAERA) also visited AERB to discuss the possible activities under the bilateral framework to further strengthen the co-operation between AERB and BAERA.

Various safety promotional events for stakeholders' as well as competency development activities for AERB staff such as theme meets, discussion meets, and training programmes were held during the quarter, which are elaborated in this issue of e-newsletter.

The 5<sup>th</sup> International Yoga Day was celebrated on June 21, 2019 with the theme 'Yoga for Climate Action'. At AERB, an enlightening talk by renowned Yoga Guru, Shri Jateen Dave on "Yoga and Health" was arranged followed by Yoga session for AERB employees.

I appreciate the efforts of the editorial team for bringing out this informative e-Newsletter. I take this opportunity to solicit your suggestions and feedback for further improving our processes.

Lepeson !!

(G. Nageswara Rao)

# **Safety Review and Regulation**

The Board of AERB is the decision making body on policy matters for regulation of nuclear and radiation facilities and associated activities. The Board comprises of a full-time Chairman, an exofficio Member, four part-time external Members and is assisted by a Secretary.

The Board of AERB held one meeting in the month of April, 2019. The highlights of the important activities conducted by AERB during last two quarters and the safety status of the regulated installations were informed to the Board. The Board expressed that commitment towards safety should be enforced at all levels in the licensee's organisation.



**AERB Board Meeting** 

### **Consenting of Nuclear and Radiation Facilities**

- Consequent to the events of leak from pressure tube of KAPS-1 and KAPS-2 on March 11, 2016 & July 1, 2015 respectively, both the units had taken up En-masse Coolant Channel Replacement (EMCCR) activities. After completion of EMCCR activities and satisfactory review and approval by AERB, KAPS-1 was made critical and synchronized to the grid on May 24, 2019. KAPS-2 had already been synchronized to the grid earlier in September, 2018.
- AERB issues licence for Nuclear and Radiation facilities under the Atomic Energy (Radiation Protection) Rules, 2004, promulgated under the enabling provision of the Atomic Energy Act, 1962. For the facilities belonging to the Department of Atomic Energy, AERB also issues licence under the Factories Act, 1948.

Following Licences/Approvals/Clearances were issued during this period:

- i) Renewal of Licence for operation of Mineral Separation Plants of Indian Rare Earths Limited (IREL) at Chavara (Kerala), Manavalakurichi (Tamilnadu) and OSCOM, Chatrapur (Odisha).
- ii) Authorization for operation of Sodium Facility for Component Testing (SFCT) at Fast Reactor Technology Group (FRTG) of IGCAR, Kalpakkam. This facility is primarily a multipurpose sodium loop for sodium testing of the scaled down components of future Fast Breeder Reactors (FBRs).
- iii) Prototype Fast Breeder Reactor (PFBR) at Kalpakkam is presently under commissioning. Clearance was issued for receipt, handling and storage of 42 nos. of fresh fuel subassemblies at Fuel Building of PFBR.
- iv) 5,134 Licences were issued to medical, industrial and research radiation facilities.

## **Initiatives towards Minimum Government and Maximum Governance**

AERB has initiated coordination with Directorate General of Health Services (DGHS) to discuss strategies and mechanisms for effective regulation of Clinical Establishments (CE) using medical devices emitting ionizing radiation. The meeting was held on June 04, 2019 at New Delhi.

The co-ordination mechanism is being evolved to fulfill AERB's mandate of ensuring radiation safety w.r.t. medical devices emitting ionizing radiation under Atomic Energy (Radiation Protection) Rules, 2004 (promulgated under the Atomic Energy Act, 1962), while simultaneously fulfilling the requirements spelt under the provisions of Clinical Establishment Act, 2010, by the National, State & UT's authorities.

### **International Cooperation**

### Meeting with Minister Counsellor, Embassy of Finland

A meeting was held with Mr. Erik Hallstrom, Minister Counsellor, Embassy of Finland, Delhi at AERB on April 23, 2019 to discuss about the forthcoming bilateral meeting between AERB and STUK. STUK is a government agency tasked with nuclear safety & radiation monitoring in Finland. Mr. Hallstrom handed over the acceptance letter from Director General, STUK to the invitation from AERB for hosting the bilateral meeting at AERB, Mumbai, scheduled in November 2019. The technical agenda items for the bilateral meeting were also discussed during the meeting.



### Visit of Consul General, U.S. Consulate, Mumbai to AERB

A three member delegation led by Mr. Edgard Kagan, Consul General, U.S. Consulate visited AERB on May 7, 2019 and held discussion with Chairman, AERB and Senior officials on US-India civil nuclear energy co-operation, especially on nuclear regulatory collaboration. Discussions were held on the licensing mechanisms for repeat design as well as imported NPPs in India. The strengthening of mutual interaction between AERB and USNRC was emphasized during the meeting.



Meeting of Chairman, Executive Director and AERB Senior Officials with US delegation

### Visit of Chairman, BAERA to AERB

Chairman, Bangladesh Atomic Energy Regulatory Authority (BAERA) visited AERB on May 16, 2019 and held discussion with Chairman AERB. The discussion primarily focused on possible activities under the bilateral framework to further strengthen the co-operation between AERB and BAERA. The status of Trilateral MoU between AERB, BAERA and ROSTECHNADZOR, which is being finalised by three regulators, was also discussed.



### **Public Outreach and Stakeholders Engagement**

### National Technology Day Celebration

National Technology Day (NTD) is celebrated every year on May 11 to commemorate the significant technological milestones achieved, and to honour the architects of these innovations. BARC/DAE had organised an exhibition on 'Nuclear Reactor Technology' during May 11-12, 2019 at DAE Convention Centre, Anushaktinagar, Mumbai. The exhibition was inaugurated by Shri Guntur Nageswara Rao, Chairman, AERB on May 11, 2019.



Shri G. Nageswara Rao, Chairman, AERB inaugurating Exhibition on 'Nuclear Reactor Technology'

AERB participated in this programme by setting up an exhibition stall with an intent to disseminate information on the role of AERB in ensuring radiation safety in generating nuclear energy as well as in the multifarious applications of radiation sources for societal benefits in the country. The exhibits and posters were explained to school / junior college students and general public.



AERB Exhibition in National Technology Day

### Theme Meeting on 'Nuclear Security Regulation'

A theme meet on 'Evolution of Nuclear Security Regulation at Nuclear Facilities & Feedback from Licensees' was organised on May 30, 2019 in AERB with an objective to disseminate changes in the regulatory review process of Nuclear Facilities on security aspects among the licensees and obtain their feedback on the same.

Apart from overview of evolution of the nuclear security regulation, the participants also got an opportunity to listen to invited talks on the evolution of nuclear security at DAE, evaluation of physical protection systems & its implementation in India and the nuclear security guidelines of International Atomic Energy Agency (IAEA) by eminent persons from the field of Nuclear Security.

Representatives from nuclear facility (NPCIL and HWB) provided their feedback on nuclear security implementation and regulatory inspection and appreciated AERB's initiative for combined inspection on Safety and Security aspects. The meeting was attended by around 100 participants from various DAE units, field experts, CISF personnel and AERB officers.



Glimpses of AERB Theme Meeting on Evaluation of Nuclear Security Requirements

### Safety Promotional Activities

AERB has issued a booklet on "Radiation Safety in Diagnostic Radiology - Information for X-ray Technologist". The booklet provides basic information pertaining to usage of diagnostic X-rays and radiation safety in various modalities of X-ray imaging. It is uploaded on AERB website. (for details visit https://www.aerb.gov.in/images/PDF/drsafetybook.pdf).



### **Human Resources Development**

### Management Development Programme (MDP)

The Management Development Programme (MDP) for Officers of AERB was conducted in two batches during April 8-12, 2019 and April 22-26, 2019 at Yashwantrao Chavan Academy of Development Administration (YASHADA), Pune.

MDP contains various topics including time and stress management, governance through management, effective communication skills, motivation, meetings and report writing skills, code of ethics, human factor engineering, selfassessment and SWOT analysis, leadership skills and lateral & creative thinking. Total 60 officers participated in the two batches. The programme gave good insight on soft skills and was well received by participants.



Shri D. K. Shukla, Executive Director, AERB delivering a talk in MDP



Participants of Management Development Programme, at YASHADA, Pune

### Advanced Training on Human Factor

In 2018, two training courses on 'Human Factor' were conducted by Prof. Rajagopalan Srinivasan, IIT Madras, which was attended by 70 AERB officers. 30 officers were selected based on the performance for the advanced course. Subsequently, the Advanced Training course on 'Human Factors' was organized during May 21-24, 2019.

Prof. Rajagopalan Srinivasan, IIT Madras covered various topics such as, Change Analysis, Barrier Analysis, Fault Tree, Event Tree etc. Additionally, Shri D. K. Shukla, Executive Director, AERB delivered a talk on "Relevance of HOFs in Regulation" and Shri K. S. Ramprasad, Head, MD&KMS made presentation on "Coverage of HOFs in AERB Regulatory Documents".



Faculty and Participants of Advanced Training Course on 'Human Factors'

### **AERB Colloquia**

Four AERB colloquia on various topics were organised during the period, the details are follows:

- Safety Reviews: Post Fukushima Accident and Status of implementation of Safety Upgrades
  ----by Smt Sonal Gandhi and Shri Neeraj Kumar, OPSD, AERB
- Radiological Safety & Nuclear and Radiological Emergencies: Concerns & Facts
  ----by Dr A. S. Pradeepkumar, AD, HSEG, BARC
- Knowledge Management A Key to Sustainable Excellence
  ----by Shri Rakesh Kumar, R&DD, AERB
- Computational Methods–Application in Nuclear Science & Engineering
  ----by Dr. Debabrata Datta, Head, RPAD, BARC & Professor, HBNI.

# **Official Language Implementation**

Under implementation of official language a quiz competition and scientific seminar were organized during the period.

### **Quiz Competition**

A Quiz competition based on the harmony between 'Atomic Energy and Environment' was conducted in AERB on June 4, 2019 by Shri Vaibhav Gholap. As many as 21 employees took part in the competition by forming team of 3 members in each. The best three teams were awarded with prizes during Scientific Seminar organized on June 6, 2019.



Participants of Quiz Competition on 'Atomic Energy and Environment'

### **Celebration of World Environment Day**

World Environment Day is celebrated on 5<sup>th</sup> June every year for encouraging awareness and action for the protection of our environment. 'Beat Air Pollution', was the theme for World Environment Day 2019. According to the global body the topic invites people to consider how they can change their everyday lives to reduce the amount of air pollution and thwart its contribution to global warming and its effects on health.



To celebrate world environment day, AERB organized a Hindi Scientific Seminar focused on the theme 'Atomic Energy and Environment' on June 6, 2019. Total 140 employees from different DAE units including AERB, participated in the seminar. Shri S. S. Bajaj, former Chairman, AERB was the Chief Guest of the seminar. The Chief Guest Shri S. S. Bajaj, Shri G. Nageswara Rao, Chairman, AERB, Shri D. K. Shukla, Executive Director, AERB also enlightened the audience with their inspiring words.



Shri G. Nageswara Rao, Chairman, AERB and Shri S. S. Bajaj, former Chairman, AERB addressing the gathering during the seminar

On this occasion, four technical lectures were delivered each highlighting the safety aspects of Atomic Energy and Protection of Environment. Speakers included Shri D.K. Shukla, Executive Director, AERB, Dr. D.S. Choudhary, Director (Operation), NPCIL, Dr. V.K. Khilnaney, Director (Operation), HWB and Shri S. K. Malhotra, Former Secretary, AEES.



Speakers Delivering talks in Hindi Seminar

The seminar was then followed by a Cultural Programme in the evening. The specially gifted artists of Blind Progressive Welfare Foundation, Dombivali rendered a heart-touching performance by belting out melodious songs.



Chairman, AERB along with artist and AERB staff

To mark the occasion, plantation of trees was carried out, in the campus of DAE Convention Centre as well as in AERB premises.



Shri G. Nageswara Rao, Chairman, AERB and Shri S. S. Bajaj, former Chairman, AERB planting the saplings in DAE Convention Centre



Plantation of saplings in AERB premises by Chairman; Executive Director and AERB Staff

### **Celebration of International Yoga Day**

The 5<sup>th</sup> International yoga day was celebrated on June 21, 2019. The theme for yoga day by UN was 'Yoga for Climate Action", whereas India declared the theme as 'Yoga for Heart'. Yoga day was celebrated in AERB on June 21. In order to commemorate the occasion, a talk on "YOGA and Health" was delivered by Yoga Guru, Shri Jateen Dave. Shri G. Nageswara Rao, Chairman, AERB graced the celebration by delivering inaugural address and Shri D. K. Shukla, Executive Director, AERB highlighted the importance of Yoga in our life. The talk by the Yoga Guru was followed by a Yoga session in which the exercises were demonstrated by him & his team and practiced by the AERB employees.







Glimpses of International Yoga Day celebration at AERB

# **Recruitment / Retirement**

AERB manpower is being augmented at different levels and through various channels in view of the expanding nuclear power programme and increasing number of radiation facilities in the country. Total sanctioned strength of AERB is 468, however present strength as on June 30, 2019 is 336 comprising of 266 scientific and technical and 70 Administrative / Accounts / Auxiliary staff.

S. No.	Name	Designation	Date	Remarks	
1	Shri Bhaskaranad Jha	AD(OL), AERB	08-04-2019	On transfer from VECC,	
				Kolkata	
2	Shri Milind Edlabadkar	Sr. Accounts	02-05-2019	On transfer from IIW,	
		Officer, AERB		DAE, Mumbai	
3	Shri S. Ranganathan	CAO, AERB	10-05-2019	On transfer from	
				BARCF, Kalpakkam	

Personnel appointed/ joined in AERB during April-June, 2019

### Personnel Retired/Transferred/Resigned in AERB during April-June, 2019

S. No.	Name	Designation	Date	Remarks
1	Shri T.S. Padmanabhan	SO(H)	27-04-2019	Demise
2	Smt. Mallika C. Nair	Sr. PS to Head, DRI, AERB	30-04-2019	Superannuation
3	Shri Abhishek Jain	AD(OL)	08-04-2019	Transferred to HWP, Kota
4	Smt. Sheela Mohan	CAO, AERB	08-05-2019	Transferred to BARCF, Kalpakkam
5	Shri L.B. Mahale	SO(G)	31-05-2019	Superannuation
6	Dr. P.K. Baburajan	SO(G)	31-05-2019	Superannuation



Chairman, AERB presenting AERB Memento to Shri L. B. Mahale Chairman, AERB presenting Service Certificate to Dr. Baburajan



Chairman, AERB felicitating Smt. Mallika Nair



Chairman, AERB felicitating Smt. Sheela Mohan, CAO

# Feedback

We appreciate feedback from readers /stakeholders. If you have any question or comment, please send us on AERB Feedback Portal.

Materials published in AERB newsletter may be reprinted or translated freely with due acknowledgement.

### **Editorial Committee**

Shri Satyawan Bansal, Smt. Uma Sarma, Shri H. K. Kulkarni, Shri V.V. Raut, Shri Soumen Sinha, Smt. Sonal Gandhi, Shri S. K. Pradhan, Smt. M. V. Inamdar, Dr. S. P. Lakshmanan, Shri Pravin J. Patil

### **Published by**

Shri S. B. Chafle, Director, R&DD