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AERB

e-Newsletter

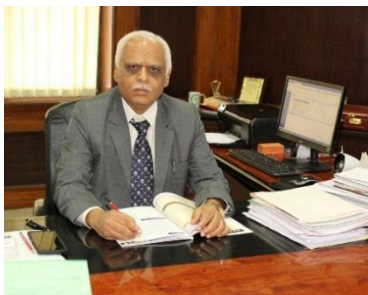
Atomic Energy Regulatory Board



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

Contents

From the Chairman’s Desk	2
Board Meeting	4
Safety Review and Regulation.....	5
Emergency Exercise at Nucler Power Plant	6
Enforcement Actions against X-Ray Facilities.....	6
Initiatives related to Minimum Government and Maximum Governance	7
Establishment of Regional Regulatory Centre.....	8
Formation of Directorate of Radiation Safety.....	9
Engagement with Stakeholders.....	9
Vigilance Awareness Week	15
Official Language Implementation	15
AERB Annual Awards-2017	15
AERB Annual Day Celebration-2018.....	18
Recruitment /Retirement.....	18
Feedback	20



From the Chairman's Desk

Season's Greetings to all.

As the year culminates, I am extremely delighted to share with you that the initiatives taken to enhance our regulatory services are blossoming. To address the concerns of the users of our web based licensing system for radiation applications (eLORA), we have set up a help desk. Hundreds of calls are being attended on a daily basis and we are hopeful that direct interaction with our staff is fruitful. We have also been receiving encouraging feedback from various nuclear facilities on the revised methodology of our regulatory inspection process.

We continued with our efforts towards spreading radiation safety awareness among stakeholders, especially for medical diagnostic X-ray equipment. As a matter of fact, our inspection for medical X-ray installations are now termed as 'Jaagrukta Seva' with an aim to inculcate safety consciousness among the users. AERB's staff have developed an in-house audio-video titled "How to safeguard yourself from X-ray radiation." It has been widely circulated on various social media platforms and is also available on AERB website. Other steps included advertisement in print media, broadcast of radio jingles and exhibition of safety posters in national seminars and conferences.

AERB is also working incessantly towards strengthening the regulatory interfaces with other national agencies such as DGCA, NABL, BIS, CDCSO etc. for streamlining the regulatory control. AERB coordinated with Maharashtra Police Academy to provide training on radiation safety and security aspects to the concerned police officers of Maharashtra in whose jurisdiction facilities handling high hazard radiation sources are located. AERB has recently signed MoU with Government of Karnataka for setting up of Directorate of radiation Safety for carrying out inspections of medical x-ray installations in the state of Karnataka.

In the last quarter, AERB has green signaled some key nuclear and radiation safety projects namely the operation of Proton Therapy Facility in a hospital in Chennai, which will be first of its kind advanced cancer treatment modalities using high energy protons. AERB has granted excavation clearance for Kudankulam Nuclear Power Project – Units 5&6.

As mentioned in our previous issue, AERB has been giving due emphasis on emergency preparedness and response in nuclear activities. A detailed table top exercise was conducted at Rawatbhata site with involvement of District officials as well as NDRF.

The details are provided in this issue. New 'Nuclear Radiation Emergency Management Centre' is in the final stage of setting up at AERB and will be functioning from the New Year 2019.

AERB jointly with Variable Energy Cyclotron Centre (VECC) organized the 35th DAE Safety and Occupational Health Professionals Meet with themes 'Leadership and Management for Safety' and 'Requirements and challenges in health management-pre/during/post-employment'. More than 250 safety and occupational health professionals from all units of DAE participated in the Meet.

The second National Conference on Regulatory Interface (NCRI-2018) was conducted on December 27-28, 2018 which has given important feedback to AERB w.r.t. Regulation of Nuclear Power Plants including Research Reactors and other Industrial Units of DAE under regulatory purview of AERB.

Our country is witnessing a massive growth in use of radiation in societal applications, namely medicine, industry, research and agriculture. Our nuclear power programme is also set to expand aggressively in the coming years. In order to exercise effective regulatory control, we at AERB are working out plans to strengthen our regional regulatory centres located at Chennai, Kolkata and New Delhi. Our new building at Pallavaram, Chennai for the Southern Regional Regulatory Centre is ready and has started functioning.

AERB is now all set to soar even higher under a new leadership. I am laying off my office in coming January and I take this opportunity to wish one and all a very happy and prosperous 2019.



(S.A. Bhardwaj)

Board Meeting

A meeting of the Board of AERB was held at Kakrapar Site on December 14, 2018. During the meeting, the Board was apprised of the roadmap of AERB for its Regulatory Processes for the coming years. The Board approved the concept note on Expansion of AERB through Regional Regulatory Centres and the proposal for revision of minimum qualifications for industrial radiographers. Board members visited KAPS-1 to see the status of restoration and preparatory activities for resuming operation as well as the newly created Simulator for 700 MWe PHWR. At the end of the meeting, the Board members felicitated Shri S.A. Bhardwaj, Chairman, AERB and fondly remembered his contributions.



Felicitations of Chairman, AERB during the 126th Board meeting held at Kakrapar Site



Site Visit of Board Members to KAPS-1

Safety Review and Regulation

The 126th meeting of the Board of AERB was held at Kakrapar Site on December 14, 2018 to see the status of restoration and preparatory activities for resuming operation of KAPS Units. During the meeting, the Board was apprised of the roadmap of AERB for its Regulatory Processes for the coming years. The Board also approved the concept note on Expansion of AERB through Regional Regulatory Centres.

Consenting of Nuclear and Radiation Facilities

- ❖ Licence granted to Apollo Hospitals Enterprises Limited, Chennai for operation of the first Proton Therapy Facility in India. Proton Therapy is one of the advanced treatment modalities of cancer using high energy protons.
- ❖ Excavation Consent was granted for Units-5&6 of Kudankulam Nuclear Power Project on 14-11-2018.
- ❖ Permission granted for resumption of construction activities at Fast Reactor Fuel Cycle Facility which was under suspension pending the investigation of an industrial accident.
- ❖ Licence of Kakrapar Atomic Power Station (Units-1&2) under the Factories Act, 1948, was renewed for operation.
- ❖ Licence for operation of Kudankulam Nuclear Power Plant-1&2 was renewed for operation under the Factories Act, 1948 for a limited period.
- ❖ Licence of Kaiga Generating Station-3&4 under the Factories Act, 1948 was renewed.
- ❖ Licence for operation of uranium mine at Turamdih was renewed.
- ❖ Licence for operation of Indian Rare Earths Limited (IREL), Udyogamandal was renewed under the Atomic Energy Act, 1962 and the Factories Act, 1948
- ❖ Issued 2,615 Licence for medical, industrial and research radiation facilities.

Operation of unit-1 of Kaiga Generating Station (KGS) for 962 days

KGS-1 completed 962 days of continuous safe operation and reactor was manually shutdown on December 31, 2018. The stable & safe operation of KGS-1 for long duration demonstrated effectiveness of regulatory oversight mechanism in India. The generated valuable data would be useful to AERB in future safety reviews.

Review of Fatal Accident at Turamdih Mill of UCIL

On November 6, 2018, an accident occurred at Turamdih Mill of UCIL wherein a contract worker engaged in the cleaning of tail pulley of belt conveyer of primary crushing plant, got trapped in between the tail pulley and belt conveyer which resulted into unfortunate fatality. On receiving intimation, AERB carried out RI for detailed investigation of the accident. It was observed that the worker violated the safety norms by working on a running belt conveyer without informing the superiors. AERB recommended UCIL to increase awareness for safety among workers and impart special training to them to avoid such mishaps in future.

Emergency Exercise at Nucler Power Plant

- A first of a kind off-site emergency exercise was conducted at Rawatbhata site on December 15, 2018 to test the decision making capabilities of the responders and to assess the actual response time taken considering prevalent environmental parameters. The exercise involved coordinated response actions from NPCIL, BARC, Crisis Management Group (CMG) of DAE, District and State Administration Authorities, NDRF, NDMA as well as AERB. The lessons learnt will be utilised in further improving overall competencies of all concerned organisations in responding to nuclear emergency, if any, in the country.

As a deviation from the past, in this exercise method, the conditions that are expected during an emergency situation are introduced to the decision makers on real time and the exercise progresses on further new conditions introduced in the form of injects. The decision on identification of plant conditions, affected area and the necessary mitigatory/response actions are expected to be appropriate to given situation during the exercise. The exercise methodology was well received and plant personnel and other response organizations took active participation.



Glimpses of Emergency Exercise at RAPS

Enforcement Actions against X-Ray Facilities

As part of the nation-wide campaign to ensure increased compliance and regulatory coverage of medical diagnostic X-ray equipment, AERB carried out unannounced inspection of DR facilities

undue radiation exposure to patient, staff, public and environment (*for details please visit <https://aerb.gov.in/index.php/english/safety-in-medical-diagnostic-x-rays>*). The videos were posted on various social media and AERB website.

- As part of public outreach programme, AERB has recently broadcast a Radio Jingle in Ahmedabad and Surat cities of Gujarat during the period October 13-19, 2018 for disseminating information on safety requirements of medical X-ray equipment.
- A joint agreement was signed between AERB and NABL on October 9, 2018 for transition of radiological laboratories accreditation from AERB to NABL.
- AERB reviewed the mandate of DGCA w.r.t. transport of radioactive material by air including in-transit storage and discussed the same with DGCA. A Working Group (WG) was formed for joint review by AERB and DGCA to establish roles and responsibilities of DGCA and AERB for the same. The WG concluded that DGCA has absolute jurisdictions to regulate the safe transport of radioactive material by air to, from, within or over India including in-transit storage at airports and AERB's role is limited to issuance of approval for transportation of shipment. The report was accepted by AERB and DGCA.

Establishment of Regional Regulatory Centre

With a view to decentralise its regulatory activities, AERB has established Regional Regulatory Centres (RRCs) at Chennai, Kolkata and New Delhi. On November 29, 2018, new Building of Southern Regional Regulatory Centre (SRRC) of AERB at DAE Nodal Centre, Pallavaram, Chennai was inaugurated by Shri. S. A. Bhardwaj, Chairman, AERB in presence of Dr. Arun Kumar Bhaduri, Director, IGCAR, Professor V. Arvind, Director, IMSc and Shri. H.E. Harsha, CEO, Cantonment Board, Chennai. A tree plantation programme was organised in the premises of the new building.



Shri. S. A. Bhardwaj, Chairman, AERB and other Senior officers during inauguration of SRRC. Chairman, AERB Planting tree in premises of New Building

Formation of Directorate of Radiation Safety

AERB signed a Memorandum of Understanding (MoU) with the Department of Health & Family Welfare, Government of Karnataka on December 22, 2018 for setting up the Directorate of Radiation Safety (DRS) for carrying out inspections of medical X-ray installations in the state of Karnataka (e.g. general radiography, dental x-ray machine, fluoroscopy, Cathlab, CT equipment) as well as to spread awareness on radiation protection & applicable regulations by organising training and awareness programmes.



Dr. A. U. Sonawane, AERB exchanging MOU with Mr. Jawaid Akhtar

The MoU was signed by Shri. Jawaid Akhtar, Principal Secretary, Department of Health & Family Welfare of Karnataka and Dr. A.U.

Sonawane, Head, Directorate of Regulatory Affairs and Communication, AERB in presence of Commissioner, Health and other senior officials of State Government.

Engagement with Stakeholders

❖ National Conference on Regulatory Interface (NCRI-2018)

AERB organised 2nd National Conference on Regulatory Interface (NCRI - 2018) during December 27 - 28, 2018 at Mumbai to obtain feedback and suggestions from licensees of nuclear facilities and to exchange information on the current regulatory requirements, issues / challenges faced by the licensees in fulfilling the requirements, which will be utilised to improve the regulatory processes. Technical sessions were held on various topics such as:



- Overall Expectations from Regulatory Framework
- Feedback on various activities of AERB
- Atomic Energy (Factories) Rules, 1996
- R&D Activities supporting regulatory decisions
- Emergency Planning and Response.

NCRI-2018 witnessed gathering of around 200 delegates with representation from the NPCIL, BHAVINI, Heavy Water Board, UCIL, IREL, including experts in the field.



Some Glimpses of National Conference on Regulatory Interface (NCRI – 2018)

❖ **DAE Safety and Occupational Health Professionals' Meet**

The 35th DAE Safety & Occupational Health Professionals' meet was jointly organised by AERB and Variable Energy Cyclotron Centre (VECC) during November 27 - 29, 2018 at Kolkata to create awareness amongst professionals and improve the safety & health management in DAE units. More than 250 delegates from various DAE units and aided Institutions and exhibitors participated in the Meet.

Themes for this year's meet was, 'Leadership and Management for Safety' for industrial safety and 'Requirements and challenges in health management - pre/during/post-employment' related to occupational health.

The "Occupational Injury Statistics and Fire Statistics-2017" for DAE units was released during the meet. The AERB Industrial Safety Awards and Fire Safety Awards for the year 2017 were presented to the winners of the DAE units by Shri S.A. Bhardwaj, Chairman, AERB.



Release of 'Occupational Injury and Fire Statistics -2017' during the Meet



Shri S.A. Bhardwaj, Chairman, AERB, presenting Industrial Safety and Fire Safety Awards to Winners of DAE Units

A technical exhibition on industrial and fire safety appliances, public awareness and safety and regulatory aspects was organised during the meet for the benefit of the participants and to encourage the interaction between industries and DAE units.



❖ Programme for Police Officials of Maharashtra

In a first of its kind initiative, AERB organised two training cum awareness programmes on “Security of Radioactive Sources at Radiation Facilities” for those Police officials in Maharashtra

under whose jurisdiction the radiation facilities using high hazard potential radioactive substances (Category-1 sources i.e. radiotherapy facilities using tele-cobalt equipment, gamma chambers and gamma radiation processing plants) are located. The objective of the training programme was to make understand / aware the role of law enforcement agency on security of radioactive material and to brief on endorsement of Security Plan for Category-1 facilities as per AERB guidelines on security of radioactive material. Audio-Visual clips on security of radioactive material were shown during the training.

The training was imparted through two training programmes which were organised at Maharashtra Police Academy (MPA), Nashik and Police Training Centre (PTC), Marol, Mumbai on 04-12-2018 and 05-12-2018 respectively. About 90 personnel in the rank of Police Inspectors, Assistance Police Inspectors, Head Constable, Police Constable attended the programme.



Dr. A. U. Sonawane, Head, DRA&C and Shri Dinesh M. Rane, RSD, AERB delivering Lectures in Programme

❖ Participation in Conference

AERB displays exhibits on the safety and regulatory aspects of nuclear and radiation facilities including its safety documents in science and technology fairs. During the period AERB setup exhibition at following conferences:

- (i) International Conference on Recent Developments in Nuclear Power Generation (ICNPG-2018) held at Telangana State Centre, Hyderabad, during October 3 - 5, 2018.



Hon. Shri Venkaiah Naidu, Vice President of India visited AERB's Stall at ICNPG-2018

- (ii) In order to enhance awareness of Orthopaedicians on radiation protection and regulatory requirements on use of X-ray equipment Orthopedics practice (e.g. radiography unit and C-arm). A talk on **“Radiation Protection and Regulatory Requirements on use of Medical X-ray equipment in Orthopedics”** was delivered by Shri Anand Pinjarkar, AERB in Indian Orthopaedics Association (IOA) Conference (IOACON-2018) held during 26th November to 1st December 2018 at Coimbatore, Tamil Nadu.



- (iii) National Conference on “Non-Destructive Evaluation (NDE)” organised by ISNT during December 19-21, 2018 at Navi Mumbai. Leaflets on “Radiation Protection in Open Field Industrial Radiography” and “Responsibilities of Contract Awarding Agency (CAA) in Industrial Radiography” were distributed to the visitors.

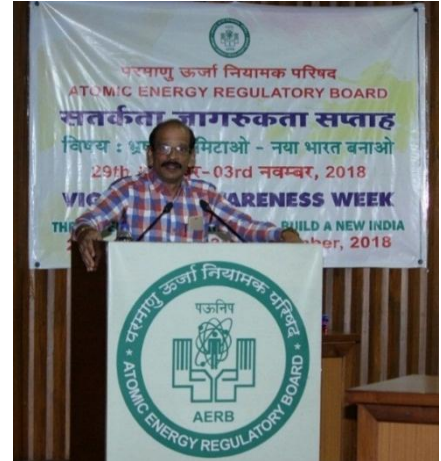
Dr. A. U. Sonawane, Head, DRA&C delivered an invited talk on **“Regulatory Challenges for Radiation Safety in NDE Applications of Radiation Sources”** in this conference.



AERB Officials Interacting with visitors at Exhibition Stall at NDE-2018

Vigilance Awareness Week

AERB celebrated 'Vigilance Awareness Week- 2018' during October 29 to November 03, 2018. Theme of this year's Vigilance Awareness week was '**Eradicate Corruption - Build a New Nation**'. Pledge was taken by AERB Staff followed by walkathon within AERB campus. A speech and poster competition was organised during the week, many employees actively participated in it. A talk on 'Eradicate Corruption - Build a New Nation' was delivered by Shri Muralidharan, Ex-DCSEM, DAE.



Official Language Implementation

Hindi competitions conducted for AERB staff, the prize distribution ceremony for these competitions was held on December 11, 2018. A special talk on "Preparedness for Radiation Emergency" delivered by Shri S. A. Sukheswalla, Former Scientific Officer of AERB.



Winners of Hindi Competitions receiving Prizes from Shri C. S. Varghese, Director, NFRG

AERB Annual Awards-2017

AERB started its award scheme from the year 2012 to promote excellence among its staff and recognise outstanding achievements of those engaged in regulatory and associated research and development activities. AERB award scheme comprises of individual awards as well as group achievement awards in following categories.

- Young Scientific Officer Award
- Outstanding Performance / Special Contribution Award
- Leadership Award-1 and Award-2
- Meritorious Service Award
- Group Achievement Award

Shri S. S. Bajaj, Former Chairmen, AERB was the Chief Guest of the function. Awards for the year 2017 were distributed on November 26, 2017.



Shri S. S. Bajaj, Former Chairman, AERB presenting Leadership Award-2017 to Shri D. K. Shukla, Executive Director, AERB



Shri R. P. Gupta, NPSD and Shri Pravin J. Patil, R&DD receiving Outstanding Performance / Special Contribution Award-2017



Young Scientific Officer Award is presented to (1) Shri Somnath Jha, (2) Shri Gopal Grandhi, (3) Shri M. Mahesh and (4) Shri Avinash Shrivastava



Smt. Latha Mohandas receiving Meritorious Service Award



RSD received Official Language Rolling Shield

With a view to encourage the implementation of official language in AERB and honoring the personnel working in Hindi, AERB has initiated Rajbhasha Rolling Shield and Rajbhasha Group Achievement Awards. On the basis of the evaluation of works done by the divisions and personnel

in the Official Language, RSD received Official Language Rolling Shield and a group of 6 personnel bagged the Group Achievement Award for official Language.

AERB Annual Day Celebration-2018

AERB staff club conducts sports and cultural activities for the welfare of the staff and family members. During the year, tournaments were conducted for Table Tennis, Badminton, Chess and Carom successfully. The AERB Annual Day was celebrated on December 15, 2018 at DAE Convention Centre, Anushaktinagar, Mumbai. AERB staff and their family members participated in annual cultural programme. An exhibition was arranged where AERB staff and family members exhibited their art work.

Recruitment /Retirement

AERB manpower 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. Total sanctioned strength of AERB is 468, however in position strength is 343 comprising of 283 scientific and technical and 60 Administrative / Accounts / Auxiliary staff.

Personnel joined during October-December, 2018

S. No.	Name	Designation	Date	Remarks
1	Smt. S. Lekshmi Kumari	Assistant Accountant	20-12-2018	Newly Joined

Personnel Retired/Resigned during October-December, 2018

S. No.	Name	Designation	Date	Remarks
1	Shri K. Srivasista	SO(H+) and Director, R&DD	30-11-2018	Superannuation
2	Shri T.R. Vivek	SO(D)	31-10-2018	Resigned
3	Smt. Shobhasri Challa	SA(C)	06-12-2018	Resigned

Shri K. Srivasista, Director, R&DD, AERB retired on superannuation on November 30, 2018. Shri K. Srivasista joined DAE in 1981 and subsequently in AERB in 1997. He contributed significantly in development of AERB regulatory safety documents. A farewell function was organised on November 30, 2018 to felicitate Shri Srivasista for his immense contribution to AERB.



Shri D. K. Shukla, ED, AERB felicitating
Shri K. Srivasista, Director R&DD

Feedback

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

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