

ATOMIC ENERGY REGULATORY BOARD, MUMBAI



e-Newsletter

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HIGHLIGHTS

From the Chairman's Desk	02	7.0 Awareness Programs for Public	07
1.0 Board Meeting of AERB	04	8.0 Stakeholder Engagement Programs	08
2.0 Permission to KAPP-4	05	9.0 Vigilance Awareness Campaign 2024	08
3.0 Regulatory Oversight of RAPS-3	05	10.0 Independence Day Celebration	09
4.0 Regulatory Inspections of Nuclear, Industrial and Radiation Facilities	06	11.0 Swachta Hi Seva Campaign	09
5.0 68 th Regular Session of the IAEA General Conference	06	12.0 Tribute to Former Board Member	11
6.0 Talk on Medical Radiation: 'A Boon or Bane'	07	13.0 Appointments / Retirements	12
		14.0 Important Link for Reference Material at a Glance	13



From the Chairman's Desk

AERB issued permission for the Kakrapar Atomic Power Plant Unit-4 (KAPP-4) to proceed with raising its reactor power to 100% for the completion of commissioning activities. This milestone follows the successful operation of KAPP-3, reinforcing our confidence in the capabilities of India's indigenous 700 MWe Pressurized Heavy Water Reactor design.

Dear Readers,

Greetings to all. As we reflect on the developments and milestones achieved during the past quarter, it is with great pride that I share with you some key highlights that demonstrate our continued commitment to safety and excellence in regulatory oversight.

In July 2024, AERB held a pivotal meeting at the Prototype Fast Breeder Reactor (PFBR) site of the BHAVINI project, offering us the opportunity to engage directly with site personnel and assess the progress of this crucial project. The successful review led to the authorization for Initial Fuel Loading, the First Approach to Criticality, and Low Power Physics Experiments, marking a significant step towards the operation of PFBR.

Furthermore, AERB issued permission for the Kakrapar Atomic Power Plant Unit-4 (KAPP-4) to proceed with raising its reactor power to 100% for the completion of

commissioning activities. This milestone follows the successful operation of KAPP-3, reinforcing our confidence in the capabilities of India's indigenous 700 MWe Pressurized Heavy Water Reactor design.

In our regulatory oversight role, AERB continued its vigilance across various facilities. From conducting inspections at nuclear, industrial, and medical radiation facilities to overseeing the return to service of Rajasthan Atomic Power Station Unit-3 (RAPS-3) after En-Masse Coolant Channel Replacement and En-masse Feeder Replacement campaign, we remained focused on ensuring compliance with safety protocols. The first criticality of RAPS-7 in September 2024 further underscores our commitment to overseeing the successful commissioning of nuclear power plants.

Our outreach initiatives continued with a successful awareness program at VHNSN College in Madurai. We also held several stakeholder engagement programs to take

feedback on safety guides under development for radiation applications.

AERB also observed significant campaigns and celebrations, including the Vigilance Awareness Campaign, Hindi Day, and the Swachhta Hi Seva Campaign. These initiatives emphasized ethical practices, national pride and cleanliness. I was honored to address the gathering on Independence Day, marking the 78th anniversary of our nation's independence, and was deeply moved by the enthusiasm of all those involved in the event.

The passing of Dr. M. S. Valiathan, a former Board Member of AERB, has deeply saddened us. Dr. Valiathan was a distinguished medical professional, and his contributions to the field of cardiac surgery and radiation safety will always be

remembered. His visionary work in shaping the regulations for radiation facilities in India has had a lasting impact, and AERB honors his legacy with great respect.

As we continue to navigate the path ahead, let us all uphold the principles of safety, integrity, and innovation that are at the heart of AERB's mission. I look forward to our collective efforts as we contribute to the growth and safety of India's nuclear sector.



**With warm regards,
Dinesh Kumar Shukla
Chairman, AERB**

1.0 BOARD MEETINGS OF AERB

(a) Board of AERB held meeting at Kalpakkam site and visited the Prototype Fast Breeder Reactor (PFBR) project. This meeting at Site also provided the opportunity to interact with site personnel and gain first-hand insights into the project's progress. This visit allowed the Board to assess the site's preparedness towards planned commissioning activities. Based on the satisfactory status of readiness and compliance with all prerequisites, the Board

authorized the Chairman, AERB, to issue permission for Initial Fuel Loading, First Approach to Criticality, and Low Power Physics Experiments. These activities will mark a significant step towards operation of PFBR. Earlier this year, Reactor core loading activity was initiated in phased manner beginning with insertion of Control Sub-Assemblies followed by Blanket Sub-Assemblies.



AERB Board Members at the PFBR Site

(b) Board of AERB held meeting at AERB headquarters, Mumbai to evaluate the readiness of Rajasthan Atomic Power Plant Unit-7 (RAPP-7) for commissioning activities. Following a comprehensive review by AERB and its committees, the Board approved the issuance of permission for

Bulk Heavy Water Addition to the Moderator System, the First Approach to Criticality, and Low Power Physics Experiments for RAPP-7 on September 10, 2024. Subsequently, RAPP-7 achieved its first criticality on September 19, 2024.



Board Meeting to Review RAPP-7 Unit Readiness

2.0 KAKRAPARA ATOMIC POWER PLANT-4 (KAPP-4)

KAPP-4 is the second unit of India's indigenous 700 MWe Pressurized Heavy Water Reactor (PHWR) design. The first unit, KAPP-3, located at the same site in Kakrapar, Gujarat, achieved its First Approach to Criticality in July 2020 and was permitted by

AERB to operate at full-rated power in August 2023.

Following comprehensive safety reviews, on August 18, 2024, AERB issued permission for KAPP-4 to raise reactor power to its rated capacity.

3.0 AERB REGULATORY OVERSIGHT FOR EMCCR & EMFR AND RETURN TO SERVICE OF RAPS-3

Rajasthan Atomic Power Station-3 (RAPS-3) was shut down on October 27, 2022 for En-masse coolant channel replacement (EMCCR) and En-masse feeder replacement (EMFR) campaign. During these activities, AERB ensured continuous regulatory oversight through increased regulatory inspections, resident Site Observer Teams (SOTs) and safety reviews.

After completion of the campaign, licensee submitted applications for Fuel Loading, Approach to Criticality, Low-Power Physics measurements and power raise of RAPS-3. After detailed review, AERB issued permissions for these activities, ensuring safe return to service of the reactor according to the established safety protocols.

4.0 REGULATORY INSPECTIONS OF NUCLEAR, INDUSTRIAL AND RADIATION FACILITIES

During this quarter, AERB conducted 32 regulatory inspections across various nuclear and industrial facilities including four special regulatory inspections. No deviations of high safety significance were reported, while one deviation of moderate safety significance was identified.

AERB carried out 280 regulatory inspections at various industrial and medical radiation facilities including 2 reactive and 13 special

inspections. No deviation of high safety significance was noted during these inspections, although 26 deviations of moderate safety significance were observed. AERB observers stationed at four nuclear power plant sites: Rawatbhata, Kalpakkam, Kakrapara, and Kudankulam continued to observe the activities at the stations and provide inputs to AERB.

5.0 CHAIRMAN, AERB AT IAEA GENERAL CONFERENCE

Chairman, AERB participated in the 68th Regular Session of the IAEA General Conference, held during 16-20 September 2024 at Vienna, Austria. On the sidelines of the General Conference, he also participated

in the International Nuclear Regulators Association (INRA) meeting and addressed the association on use of Artificial Intelligence in nuclear industry and for safety authorities.



Indian Delegates at the IAEA

6.0 TALK ON MEDICAL RADIATION: 'A BOON OR BANE'

A talk titled "Medical Radiation: A Boon or Bane" was organized on September 4, 2024, for AERB and BARC officials. The talk was delivered by Dr. R. A. Badwe, Honorary Professor Emeritus and Former Director of

the Tata Memorial Centre. Dr. Badwe's insightful and thought-provoking presentation was highly enlightening and received an enthusiastic response from the audience.



Glimpses of the Talk Delivered by Dr. R. A. Badwe

7.0 AWARENESS PROGRAM FOR STUDENTS AT MADURAI

In continuation to AERB's drive towards public awareness and engagement, an awareness programme was conducted at Virudhunagar Hindu Nadars Senthilkumara Nadar (VHNSNC), Madurai on July 25th, 2024.

The program aimed to educate the students of VHNSNC about AERB's regulatory framework and activities, fostering awareness and understanding of its role in ensuring nuclear safety.



Glimpses of the Public Awareness Programme

8.0 STAKEHOLDERS ENGAGEMENT PROGRAMME

AERB is in the process of publishing practice-specific safety guides for radiation facilities. These regulatory documents will guide the stakeholders in compliance with the stipulated practice specific regulatory requirements. AERB organised stakeholder engagement meetings to obtain stakeholders' views on practice-specific safety guides. Towards this, programs were conducted for Industrial Radiography

Practice on July 5, 2024, at SRRC, Chennai; for Medical Cyclotron and X-Ray Generating Equipment for Research, Education, Inspection and Analysis Practice on August 09, 2024, at NRRC, Delhi and for Particle Accelerator Facilities and Gamma Irradiation Chamber during August 29-30, 2024, at VECC, Kolkata. The suggestions/concerns of the stakeholders were noted for further deliberations.



Glimpses of Stakeholder Engagement Program

9.0 VIGILANCE AWARENESS CAMPAIGN 2024

AERB observed Vigilance Awareness campaign during August 16 to September 01, 2024 with the theme "Culture of Integrity for Nation's Prosperity." The campaign included lectures for staff on key topics such

as Public Procurement, Ethics and Governance, and Conduct Rules, aimed at reinforcing ethical values and transparency within the organization.



Glimpse of Vigilance Awareness Campaign-2024

10.0 INDEPENDENCE DAY CELEBRATION

AERB celebrated 78th Independence Day on 15th August 2024 in Niyamak Bhavan complex. On this occasion, Chairman of

AERB hoisted the National Flag and addressed the gathering.



Glimpses of Independence Day Celebration-2024

11.0 SWACHTA HI SEVA CAMPAIGN AT AERB

The Swachhta Hi Seva Campaign was organized from September 15 to October 2, 2024, at AERB. With an aim to raise awareness among AERB staff, a variety of competitions were held. AERB employees

also performed street plays emphasizing on the importance of cleanliness. Additionally, a Walkathon was organized to further promote the message of cleanliness and community participation.



Glimpses of 'Swacchta Hi Seva' Campaign at AERB

11.0 HINDI PROGRAMS AND ACTIVITIES

11.1 Hindi Workshop

Various Hindi programmes were conducted to enhance the adoption of official language in day to day functioning by all the employees.

11.2 Hindi Day Celebration

Hindi Day and the prize distribution ceremony were organized at the DAE Convention Centre, Anushaktinagar, on September 20, 2024. During the event, Shri

S.B. Chafle, Executive Director of AERB, addressed the gathering. Shri Dhanesh Parmar, Assistant Director (OL), AERB, read the message from the Chairman of DAE. Certificates were awarded to the winners by the dignitaries present on stage. Additionally, a Kavi Sammelan was held, where staff members actively participated, making the event a lively and engaging celebration.



Glimpse of Hindi Day Celebration

12.0 HEARTFELT TRIBUTE TO FORMER BOARD MEMBER OF AERB

Padma Vibhushan Dr. M. S. Valiathan left for heavenly abode on July 17, 2024. He was a distinguished luminary of medical fraternity, renowned for his path breaking innovations in cardiac surgery. He had served the Board of Atomic Energy Regulatory Board from October 2001-October 2005. Dr. Valiathan had made immense contributions in shaping the regulations of radiation facilities and associated activities in the country. His most profound contributions had been towards instituting measures to address the perceptions of public on safety of nuclear power plants. It was with Dr. Valiathan's pioneering initiative and guidance that AERB could successfully engage and involve the universities and institutions in collection of baseline health data and conduct of epidemiological studies of public staying in

the vicinity of nuclear power stations. His farsighted vision and insights had been instrumental in establishing AERB as an organisation with credibility and trustworthiness. Dr. Valiathan passing away has been a great loss to the country. AERB pays its deepest condolences to Dr. Valiathan's family. AERB will continue to fondly cherish the significant and valuable contributions made by Dr. Valiathan.



Dr. M. S. Valiathan

13.0 APPOINTMENTS / RETIREMENTS / TRANSFERS

Following officials were appointed in AERB

S. No.	Name	Designation	Date of Joining	Remarks
01	Shri Pranay Raut	Technical officer (C)	25-09-2024	Direct Recruitment
02	Shri Mohammad Arshad Pathan	Technical officer (C)	26-09-2024	Direct Recruitment
03	Shri Niketan Kumar	Technical officer (C)	26-09-2024	Direct Recruitment
04	Shri Yashwant Deepak	Technical officer (C)	26-09-2024	Direct Recruitment
05	Ms Aswini N	Technical officer (C)	30-09-2024	Direct Recruitment
06	Ms Sheela Sahu	Technical officer (C)	30-09-2024	Direct Recruitment
07	Shri Shekhsophil Shekhnura Shekh	Technical officer (C)	30-09-2024	Direct Recruitment
08	Shri Dinesh Chandra Gautam	Technical officer (C)	30-09-2024	Direct Recruitment

Following officials Retired/Transferred/Resigned from AERB:

S. No.	Name	Designation	Date	Remarks
01	Smt. Arati Samant	Upper Division Clerk	03-09-2024	Transferred to DAE on promotion
02	Shri K. V Prakash	Assistant Account	30-09-2024	Superannuated

14.0 IMPORTANT LINK FOR REFERENCE MATERIAL AT A GLANCE

S. No.	Title/ Website	Link
1.	Chairman's Desk AERB - Atomic Energy Regulatory Board	https://www.aerb.gov.in/english/about-us/chairman-s-desk
2.	Codes & Guides AERB - Atomic Energy Regulatory Board	https://www.aerb.gov.in/english/publications/codes-guides
3.	AERB ANNUAL REPORT	https://www.aerb.gov.in/english/publications/annual-report
4.	Newsletter AERB - Atomic Energy Regulatory Board	https://www.aerb.gov.in/english/publications/newsletter
5.	Feedback AERB - Atomic Energy Regulatory Board	https://www.aerb.gov.in/english/feedback
6.	Research Publications AERB - Atomic Energy Regulatory Board	https://www.aerb.gov.in/english/publications/research-publications
7.	Licensing/Consenting AERB - Atomic Energy Regulatory Board	https://www.aerb.gov.in/english/regulatory-process/licencing
8.	Regulatory Inspections AERB - Atomic Energy Regulatory Board	https://www.aerb.gov.in/english/regulatory-process/regulatory-inspections
9.	Regulatory Enforcement AERB - Atomic Energy Regulatory Board	https://www.aerb.gov.in/english/regulatory-process/enforcement
10.	Safety Review & Assessment AERB - Atomic Energy Regulatory Board	https://www.aerb.gov.in/english/regulatory-process/safety-review-assessment

Feedback

We appreciate feedback from readers and stakeholders. If you have any questions or comments, please send them to us on the AERB Feedback Portal. Material published in the AERB Newsletter may be reprinted or translated freely with due acknowledgement.

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Shri A. P. Garg, Director, Directorate of Regulatory
Affairs & External Relations, AERB, Mumbai



ATOMIC ENERGY REGULATORY BOARD

Niyamak Bhavan, Anushaktinagar, Mumbai- 400094, Maharashtra